

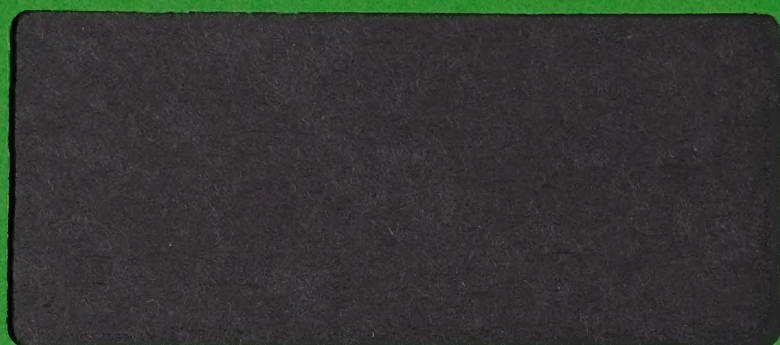
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the ROYAL COMMISSION on the NORTHERN ENVIRONMENT

NUCLEAR WASTE AND THE NORTH

Funding Program Report



ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT

J.E.J. FAHLGREN, COMMISSIONER

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NUCLEAR WASTE AND THE NORTH

by:

Terry Graves

April 1980

THIS PUBLICATION HAS BEEN PREPARED WITH THE FINANCIAL ASSISTANCE OF THE ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT'S FUNDING PROGRAM. HOWEVER, NO OPINIONS, POSITIONS OR RECOMMENDATIONS EXPRESSED HEREIN SHOULD BE ATTRIBUTED TO THE COMMISSION; THEY ARE THOSE SOLELY OF THE AUTHOR(S).

Generality of nuclear development:

an issue?

OTTAWA (CP) — The president of Eldorado Nuclear Ltd. says he's tired of a political debate on the morality of nuclear development and the danger of nuclear weapon proliferation.

"I see no reason why nuclear power should be singled out against energy projects, or for that matter any project, for examination of the merits of proceeding with development."

N.M. Ediger said.

Kirkland Lake, Northern Daily News, Thurs., Feb. 23, 1980

Sudbury people protest nuclear waste research, dumping ground

TORONTO (CP) — People living near a nuclear waste research project in the Sudbury, Ont., area do not want it continued because they fear it will be used as a nuclear waste dumping ground, says the Sudbury's regional council.

Previously secret minutes cited

Ontario hides A-waste

BY KERR MACKIN

The Ontario Government has been manipulating Canada's nuclear waste disposal program.

rather than the agencies involved publicly

Safe Method Found To Dispose Of Waste

BY MARY ELLEN LOZIER

Staff Reporter

The three-day Canada Conference on Nuclear Waste being held in Kirkland Lake, Ont., Friday, with delegates from both Canada and the United States discussing nuclear power and nuclear waste disposal.

Commissioner Emilie Varanini, California Energy Resources, Conservation and Development Commission, discussed the problems the U.S. is having with nuclear waste.

Battle to close radioactive site

While Kirkland Lake is being regarded as a possible nuclear waste disposal site, Newcastle Town Council battle with the Atomic Control Board to close radioactive site in the vicinity.

Efforts to close received a setback when the board said nothing it could do to the closing.

LEGISLATIVE LEADS

What to do about nuclear waste?

By DEWEK NELSON

Queen's Park Bureau

stable Canadian Shield granite formation called gneiss.

Kirkland Lake, Northern Daily News, Tues., Feb. 12, 1980

AECL distorted facts discredit conference

or a AECL and Ontario Hydro. Graves goes on to say "is his belief that Ontario Hydro public"

Drift Toward Unparalleled Disaster

"The splitting of the atom changed everything save man's mode of thinking, and thus we drift toward unparalleled disaster."

Albert Einstein

AECL Info Program On Nuclear Waste Extended In N. Ont.

From the Ottawa Bureau of the Northern Ontario


portunity to be well informed.

The search by AECL for a site, which involves airborne reconnaissance, seismic studies and test drilling, must meet with public approval before any procedures are implemented.

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NUCLEAR REACTORS PRODUCE LARGE QUANTITIES OF HIGHLY RADIOACTIVE SPENT FUEL. AT PRESENT ONTARIO'S NUCLEAR PROGRAM ADDS 1000 TONNES PER YEAR TO THE ALREADY ACCUMULATED 3,000 TONNES OF HIGH-LEVEL WASTE. THESE WASTES WILL BE RADIOACTIVE FOR OVER HALF A MILLION YEARS.

IN ITS INTERIM REPORT ON NUCLEAR POWER, ONTARIO'S ROYAL COMMISSION ON ELECTRIC POWER PLANNING RECOMMENDED A HALT TO NUCLEAR EXPANSION IF A "PANEL OF INDEPENDENT EXPERTS EXPRESSED DISSATISFACTION WITH THE PROGRESS IN SPENT FUEL DISPOSAL RESEARCH AND DEVELOPMENT BY, SAY, 1985".

INDUSTRY EXPERTS FEEL THE SOLUTION TO THE DISPOSAL OF HIGH-LEVEL WASTE IS CLOSE AT HAND, IN GEOLOGIC FORMATIONS. CRITICS BELIEVE THERE IS THE POTENTIAL FOR "CATASTROPHIC REPOSITORY FAILURE".

IN NORTHERN ONTARIO, AECL HAS APPROACHED SEVERAL COMMUNITIES FOR PERMISSION TO DO RESEARCH IN ROCK FORMATIONS. BUT THERE HAVE BEEN PROBLEMS. SOME COMMUNITIES HAVE REFUSED, SOME ARE UNDECIDED.

FOR THE MOST PART CITIZENS OF NORTHERN ONTARIO KNOW FAR TOO LITTLE ABOUT THE ISSUE TO MAKE DECISIONS WHICH WILL AFFECT THEIR COMMUNITIES FOR CENTURIES.

"THE WASTES AND IRRADIATED FUELS POSE A
THREAT FOR A PERIOD GREATER THAN THE
TIME THAT HAS ELAPSED SINCE MAN'S
FIRST STEPS TOWARD CIVILIZATION."

HARE REPORT, 1977

IF OUR MODERN AGE CAN BE CHARACTERIZED BY TWO WORDS, COMPLEXITY AND IMMEDIACY, THEN THE ISSUE OF NUCLEAR WASTE IS TRULY A CHILD OF OUR AGE.

BECAUSE OF THE COMPLEXITY OF THE ISSUE I HAVE, FOR SEVERAL WEEKS, HAD MIXED FEELINGS ABOUT WHAT TO PRESENT TO YOU. I HAVE CONSIDERED GOING THE ROUTE OF "GIVE THEM WHAT THEY WANT TO HEAR" AND I HAVE CONSIDERED UNLOADING ON TO YOU EVERY SHRED OF EVIDENCE, DOCUMENTATION AND OPINION WHICH HAS FOUND ITS WAY INTO MY POSSESSION. AT RISK OF CREATING INFORMATION OVERLOAD I HAVE OPTED FOR A PRESENTATION MORE CLOSELY RESEMBLING THE LATTER THAN THE FORMER.

I SPENT MOST OF MY LIFE IN HAMILTON AND SURROUNDING AREA. AS A HAMILTONIAN ONE COMES TO EXPECT TO SEE THE AIR ONE BREATHE, AIR WHICH OFTEN IS MORE VISIBLE THAN BREATHABLE. HAMILTON HARBOUR HAS LONG BEEN THE TARGET OF 'WALK-ON-THE-WATER' JOKES. WE ARE TOLD THAT POLLUTING EMISSIONS ARE MONITORED AND COMPANIES CLOSELY REGULATED. WE ARE TOLD THAT A CERTAIN LEVEL OF EMISSIONS OF PARTICULATE IS NECESSARY OR ACCEPTABLE (A KEY TERM IN NUCLEAR LEXICON) FOR ECONOMIC REASONS. FOR THE GOOD OF THE GROSS NATIONAL PRODUCT. FOR THE GOOD OF MAKING HAMILTON AND CANADA GROW.

I MOVED TO TORONTO. BETWEEN 1975 AND 1978 I LIVED IN A BEAUTIFUL LITTLE AREA WHICH IS NOW PART OF PICKERING. THE AREA IS BORDERED ON THE WEST BY THE ROUGE RIVER, ON THE EAST BY A CONSERVATION AREA AND ON THE SOUTH BY BLUFFS WHICH RISE ABOVE LAKE ONTARIO.

TWO MILES AWAY IS PICKERING NUCLEAR GENERATING STATION. I DECIDED TO LEARN SOMETHING ABOUT IT. I LEARNED THAT MANY ACCIDENTS HAVE OCCURRED IN THE NUCLEAR INDUSTRY IN THE U.S. I LEARNED THAT ROUTINE EMISSIONS OF CERTAIN RADIOACTIVE GASES AT ACCEPTABLE LEVELS IS ALLOWABLE FOR REASONS OF ECONOMY.

I LEARNED THAT WHILE THE CANADIAN HEAVY WATER REACTOR OPERATION IS QUITE DIFFERENT IN DESIGN FROM U.S. LIGHTWATER NUCLEAR REACTORS, THE SAFETY SYSTEMS ARE NOT EXTENSIVELY DIFFERENT NOR MORE EFFECTIVE.¹

I DECIDED TO MOVE TO NORTHERN ONTARIO. I LIVED HERE FOR EIGHTEEN^{MONTHS} WHEN, I LEARNED THAT ATOMIC ENERGY OF CANADA LTD. WAS INTERESTED IN DOING RESEARCH IN THIS AREA OF NORTHEASTERN ONTARIO,

MY MANDATE, FOR THIS COMMISSION, AS OUTLINED ON SCHEDULE #1 IN THE LETTER OF AGREEMENT STATES:

PURPOSE OF THE PROJECT

- A) TO RESEARCH THE IMPLICATIONS AND IMPACT OF THE LOCATING OF STORAGE OR DISPOSAL FACILITIES FOR HIGH-LEVEL NUCLEAR WASTES IN NORTHERN ONTARIO.
- B) TO HOLD A CONFERENCE TO BRING PEOPLE FROM ACROSS NORTHERN ONTARIO TOGETHER TO GAIN THEIR PERSPECTIVES ON SUCH PROJECTS AND TO EXPOSE THEM TO THE VIEWS OF THE EXPERTS.
- C) TO INFORM THE PUBLIC OF THE IMPLICATIONS OF SUCH FACILITIES.

IN LATE OCTOBER, 1979, AECL APPROACHED THE CITY COUNCIL OF TIMMINS, ONTARIO WITH A REQUEST TO SURVEY, BY AIR, A GEOLOGIC FORMATION IN CLOSE PROXIMITY TO THE CITY. AECL'S PURPOSE WAS TO ASCERTAIN IF THE FORMATION WAS A SUITABLE ONE IN

WHICH TO DO RESEARCH AS PART OF THEIR NUCLEAR WASTE MANAGEMENT PROGRAM. THE PRESS IN NORTH EASTERN ONTARIO REPORTED THAT AECL SUGGESTED THAT THEY WERE ALSO INTERESTED IN DOING RESEARCH IN THE KIRKLAND LAKE AREA. THIS WAS CONFIRMED BY AECL STAFF MEMBER JOHN WRIGHT OF THE WHITESHELL NUCLEAR RESEARCH ESTABLISHMENT IN PINAWA MANITOBA. IT WAS ALSO REPORTED THAT AECL HAD APPROACHED THE TOWN COUNCIL OF IROQUOIS FALLS REGARDING WASTE DISPOSAL RESEARCH. I FOUND THAT AECL WAS ONLY ONE OF FOUR GOVERNMENT AGENCIES OR DEPARTMENTS ON THE INTERGOVERNMENTAL CO-ORDINATING COMMITTEE INVOLVED IN THE WASTE PROGRAM. OTHER MEMBERS OF THE INTERGOVERNMENTAL CO-ORDINATING COMMITTEE ARE ONTARIO HYDRO, MINISTRY OF ENERGY FOR ONTARIO DEPT. OF ENERGY, MINES AND RESOURCES. IT WAS RECENTLY EXPOSED BY THE SELECT COMMITTEE ON ONTARIO HYDRO AFFAIRS THAT ONTARIO HYDRO IS DEEPLY INVOLVED, THOUGH MAINTAINING A "LESS VISIBLE ROLE", IN THE WASTE PROGRAM. IN CONSIDERING THE SIZE OF THE PUBLIC RELATIONS DEPARTMENTS OF AECL AND ONTARIO HYDRO AND AFTER READING REPORTS ON AND SPEAKING TO CITIZENS IN ATTIKOKAN ONTARIO I REALIZED ONLY BY ENSURING THAT THE PUBLIC HAD THE OPPORTUNITY TO HEAR AN ALTERNATIVE POINT OF VIEW OR PREFERABLY HEAR BOTH THE NUCLEAR INDUSTRY PROPONENTS AND ITS CRITICS TO GETHER IN THE SAME FORUM, SUBJECT TO QUESTIONING FROM THE PUBLIC AND ABLE TO CHALLENGE EACH OTHERS CONTENTIONS COULD RATIONAL DECISIONS ON RISK ACCEPTANCE OR REJECTION BE MADE. FOR THE PRIMARY ISSUE HERE IS WHETHER OR NOT THE PUBLIC IN ANY AREA IS WILLING TO ACCEPT THE RISKS INHERENT NOT ONLY IN THE DISPOSAL OF RADIOACTIVE WASTES PUT ALSO IN THE PROCESSES CONDUCTED ON THE WASTES PRIOR TO DISPOSAL AND IN THE TRANSPORTATION TO THE FACILITY.

ONE MAJOR STUMBLING BLOCK IN GIVING THE PUBLIC ADEQUATE INFORMATION TO MAKE EDUCATED DECISIONS ON THIS ISSUE IS THE PLACING OF THE RESPONSIBILITY FOR THE PUBLIC INFORMATION PROGRAMS IN THE HANDS OF THE NUCLEAR PROPONENTS, AECL AND ONTARIO HYDRO.

NO ONE CAN DISCLAIM THE DAMAGING EFFECTS OF RADIATION. NO ONE CAN DENY THAT ACCIDENTS OR UNKNOWN PHENOMENA WILL NOT OCCUR, ONLY THAT THEY ARE UNLIKELY. A GREAT DEAL OF THE RESEARCH INTO NUCLEAR WASTE DISPOSAL IS BASED ON MATHEMATICAL PROJECTIONS AND ANALYSES NOT ON CONCRETE EVIDENCE OR SCIENTIFIC FACT. BECAUSE AECL'S PROGRAM IS CURRENTLY IN THE RESEARCH PHASE MANY PEOPLE FEEL UNEASY WITH THE FACT THAT THEY HAVE SCHEDULED THE CONCEPT VERIFICATION PHASE WITH SITE SELECTION FOR A TEST FACILITY TO COMMENCE BETWEEN 1981 AND 1983.

¹ Norman T. Rasmussen,

I applied to the Royal Commission on the Northern Environment for funding to do extensive research on the implications of nuclear waste AND to sponsor a conference on nuclear energy which would be open to the citizens of Northern Ontario; to the proponents of the nuclear industry - particularly those involved in waste management research; and to non-industry experts.

RESEARCH 1

My first action of research was to request AECL to forward, to me, all of their available printed material pertinent to nuclear waste disposal. I received, in reply, copies of various pieces of public relations literature including The MANAGEMENT OF RADIOACTIVE FUEL WASTES; The CANADIAN DISPOSAL PROGRAM and an information booklet on the transportation of nuclear waste. (The latter was recently taken out of circulation after inaccuracies regarding accidents were found in it.) I also received other information on transportation of wastes; on the Disposal Program and an information booklet from Ontario Hydro.

I next contacted the Nuclear Regulatory Commission in United States for their literature regarding waste disposal programs.

(they have made five attempts over the last thirty years at finding a permanent waste disposal method....all have failed.)

I contacted Dr John Gale of the Earth Sciences Department of the University of Waterloo, Waterloo, Ontario. Dr Gale, who does research work on hydrogeology under contract to AECL, directed me to studies which I should refer to, e.g. The Swedish Experience. He committed himself to making a presentation at the Canada Conference.

Other Experts Contacted For Information:

Dr Dean Abrahamson	University of Minnesota
Dr John Holdren	University of California, Berkeley
Dr Graeme Strathdee	AECL, Pinawa, Manitoba
Dr Gordon Edwards	Can. Coalition for Nuclear Responsibility.
Dr Earnest Sternglass	University of Pittsburgh
Dr Rosalie Bertel	Roswell Park Cancer Research Ins. Buffalo, N.Y.
Dr Irwin Bross	Roswell Park Cancer Research Institute.
Dr Helen Caldicott	Physicians for Social Responsibility. Boston.
U.S. Dept. of Energy	Washington, D.C.
Amory Lovins	F.O.E. London, England.
Dr David Brooks	Energy Probe, Ottawa
Professor Stan Segal	Queen's University

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Dr Robert Woolard
Dr R. Erwing
Dr John Winchester
Herman Boerma
Dr Rustrum Roy
Dr Johnathan Callonder
Dr Gene Rocklin

British Columbia Medical Association
University of New Mexico
National Research Institute, Boulder, Colo.
Saskatoon
University of Pittsburgh
University of New Mexico
University of California.

I acquired videotapes and films related to nuclear issues:

More Nuclear Power Plants
Dr Helen Caldicott
Caution - Science at Work
The Great Debate

A Danish film.
California Lecture. April, 1979.
CBC Fifth Estate
Pierre Berton with Drs. Edward Teller
and Gordon Edwards.

I showed one or more of these films at the twenty public meetings held in Dec. and January. I spoke at a New Liskeard Lions Club meeting, at council meetings in both New Liskeard and Kirkland Lake and spoke to over three hundred students in New Liskeard Secondary School. My talks were based on my research and were designed to stimulate interest in the nuclear issue; to encourage public involvement and to make people aware of the planned Canada Conference.

DISCUSSIONS WITH AECL:

In late November, 1979, I went to Toronto with the intention of meeting with AECL staff to outline my Canada Conference project but was directed to deal with Mr Egon Frech, AECL's public relations director in Pinawa, Manitoba. Upon contacting Mr Frech I outlined our plans and asked for the involvement and co-operation of AECL. I asked Mr Frech if he would be interested in organizing the industry proponents and if AECL would be willing to fund a portion of the conference expenses (\$2,500). I followed this conversation up with a letter before being told by John Wright of AECL that no funding would be available. I told him that AECL, despite their refusal to assist financially, was still invited to participate and that the time was negotiable. Mr Wright stated that AECL was not interested in contacting industry proponents.

I made an identical proposal to Mr Hugh Irvine of Ontario Hydro with similar results.

In the course of the several weeks following these initial contacts with AECL and Ontario Hydro we made many more attempts, through a number of channels, to gain the participation of both agencies in the conference. These are outlined in the chronology:

After discussions with various groups and individual citizens I decided that holding a one day seminar would not be workable. I could not expect people to travel great distances for a short program and that a short program would limit the opportunity of many views being put forth, consequently a three day conference was decided upon. During the first week of January, 1980, I found the workload piling up and decided that I would require some support if the conference were to be successful. Those enlisted to help in organizing the conference include Shirley MacDonald-Graves, David Rees-Thomas, Tom and Carolee Wright, Ester Pummel, Bernadette Fernandez, Dr Fred and Pat Hacking, Joesph Meuthing, Janet Calcaterra, Patti Smith, Ambrose Raftis, Wendy Sadoquis, Dr

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Ian and Joyce Lindsay, Gerry Russell, Peter McMillian, Daniel Cranney, Linda Mustard, Ken Nichols, Ken Jackson, Virginia Yade, Louise Nadd, Kim Strva, Mary-Ann Salaba, Marleen Nicholls, Pat and Bill Klaas, Ted and ~~Da~~ and Ormston.

It was during a meeting of this organization that the name CANWIN was suggested and adopted. This was clearly an oversight on my part for which I have made a public apology. The name was dropped immediately upon hearing of the conflict it was creating for the Royal Commission.

At various times it appeared very promising that AECL would participate. Arnold Peters, member of parliament for twenty three years for Temiskaming District, approached AECL on my behalf and was told they would make a presentation. Mr Peter's, during the conference, stated that AECL had been "dishonest to your honourable member" and were "gutless and without substance for not appearing".

On January 18th Mike Martin of AECL contacted me and in the course of our discussion asked me to book accommodations for four representatives of AECL and he named who they would be sending. He also discussed the possibility of AECL following Gordon Edwards and Norman Rubin. I then heard nothing until eight days prior to the conference when I received a lengthy telegram, included herein, which demanded various changes in the conference program. I replied that, despite the fact AECL's request coming at so late a date was unreasonable, we would comply to essentially all of them to gain AECL's participation. We heard nothing from them and then learned that AECL was holding a press conference in Kirkland Lake to explain why they would NOT be participating.

Three hours prior to this press conference, at 11:00 a.m. Mr Egon Frech of AECL and John Davies of Ontario Hydro refused to tell me what their decision was on attending. The media persons at the press conference were presented with a several page package in support of AECL's refusal to participate. Two hours

after the press conference I received a telegram of several words to tell me AECL would not attend.

That same day I received a telegram from Ontario Hydro stating they would not attend.

The following day Wednesday, January 30th, at the Temiskaming Municipal Association meeting to which both AECL and TEAC were invited to make presentations, I proposed to Dr Terry Rummery of AECL that we would make the entire Friday morning portion of the program available to AECL to do with as they pleased; with ^{out} questions or rebuttal from the public or non-industry experts. This was in addition to their Saturday morning slot and their two two hour workshop times. Several days later I received a negative response.

As illustrated by this chronology, efforts to gain AECL and Ontario Hydro's participation continued up to within hours of the conference opening.

It became evident, in my negotiations with these organizations, that they would refuse our invitations regardless of the provisions made to accommodate them. One major point of dissension was time allotment. When I offered AECL all of the time they requested they declined on the grounds that I was politically partisan.

In reports to the press, and in the responses we received directly from AECL and Ontario Hydro, their primary reason for not participating in the Canada Conference was what they termed 'a lack of balance on the program'. There are two areas which must be addressed in response to this allegation: The first concerns the reticence of either agency to inform us of their intentions; as the conference date drew closer and a schedule had to be drawn up I did so with those who were willing to make a committment. The second point to be addressed concerns the entire question of balance in informing the public of programs which directly affect them.

In 1978 the Committee for Nuclear Issues in the Community (CNIC) was established by the department of Energy, Mines and Resources, (EMR). CNIC was to provide a balanced information program on Nuclear issues for Canadians, however, even before their first public meeting could be held co-chairman, Dr Pierre Dansereau, resigned labelling CNIC a "white-washing operation". (May I point out that EMR also provides funds for AECL.)

A CNIC public meeting scheduled for Sault Ste. Marie was cancelled because representatives of Ontario Hydro and AECL would not be present and therefore a balanced presentation was not possible. Why were AECL and Ontario Hydro not going to be present at a forum to which they had already committed themselves? Perhaps because Dr Gordon Edwards was to take part and AECL has maintained a policy of avoiding public confrontation with Dr Edwards. Dr David Brooks of CNIC resigned and accused AECL of flexing its political muscle behind the scenes and sabotaging the CNIC program.

In March of 1978 CNIC sponsored a conference in Vancouver in which the nuclear establishment including AECL and Ontario Hydro, was well represented while the critics of nuclear power and policy were under-represented.

In November of 1978, at Carleton University in Ottawa, the Canadian Nuclear Policy Conference was held. Sponsored in part by the Science Council of Canada no nuclear critics were invited to attend and yet no concern about an imbalanced program was voiced.

It begins to appear that AECL and Ontario Hydro appear only at conferences with imbalanced formats heavily weighted towards the pro-nuclear position.

THE DANGERS OF RADIOACTIVE WASTES

"Radioactive wastes are highly toxic. A commonly cited measure of this toxicity is afforded by a computation of the quantity of water needed to dilute high-level waste to levels specified in the Radiation Concentration Guides.

These volumes were tabulated by Blomeke and Bond (1976). A volume of $5.2 \times 10^{12} \text{ m}^3$ of water which is 4 percent of the oceanic volume ($1.4 \times 10^{14} \text{ m}^3$) would be needed to dilute the wastes on hand at the year 2000 to levels specified in the RCG (this would be international wastes); this volume is almost double that of fresh water in global storage in lakes, rivers, ground water, and glaciers. Even after 1 million years, the volume of water needed to dilute these wastes to the levels specified in the RCG is significant in terms of water stored in individual major lakes and equifiers."

Most studies of the effects of radiation on humans were done on survivors of the U.S. A-bombings in Hiroshima and Nagasaki. From these studies it was assumed that any effects indicated by exposure to a certain level of radioactivity would be worsened by exposure to higher levels and in attempts to evaluate the effects of low levels of radiation, the agencies doing these studies extrapolated the results of these high dose studies to low dose exposure. These extrapolations are based on the assumption that there is a linear relationship between the total radiation dose a person receives and its effect.

This assumption has been repudiated recently by a number of studies on the effects of low-level radiation. It is now indicated by these studies (Dr. John Gofman and Dr. A. Tamplin, Dr. John Mancuso, Dr. Rosalie Bertel, Dr. Irwin Ross, Dr. Alice Stewart and Dr. George Kneale, Dr. Thomas Nagarian) that radiation-related cancer deaths are distinctly related to radiation exposure at today's "acceptable levels".

Radiation cannot be detected by the human senses. Once a radioactive particle is inhaled or ingested the potential for damage is vastly increased. There is no way to eliminate or counteract it once it is released into the environment or gets into a body. All creatures are affected, with humans, particularly children (who have very actively dividing cells) being the most susceptible to radiation damage.

Radioactive gases and dust particles contaminate air, water and soil. The contamination is concentrated in vegetation and then in animals. Humans concentrate radioactivity from both sources through ingestion. Some radioactive particles are seen by the body as useful nutrients. Plutonium for instance is mistaken for iron and is passed from the mother to the fetus. It can kill, destroy or impair a cell responsible for development of an organ like the heart or brain thus

deforming the unborn child.

Egg or sperm cells, when exposed to radiation, can be damaged to a degree such that genetic deformities occur, however the mutation may not manifest for generations.

There are over 200 genetic diseases such as Monogolism (Down's Syndrome) and cystic fibrosis which can be caused by exposure to even low doses of radiation.

1. J.D. Bredehoeft, A.W. England, D.B. Stewart, N.J. Trask and I.J. Winograd; Geologic Disposal of High-Level Radioactive Wastes - Earth Science Perspectives, Geological Survey Circular 779, 1978.

RADIOACTIVE MILL TAILINGS:

My mandate to the Royal Commission was to do research on high-level radioactive waste. In the course of my research I learned a great deal about other forms of nuclear waste. Perhaps the most disturbing, because of government and industries refusal to deal with it, is the problem of radioactive mill tailings.

For every ton of uranium ore which is mined at Elliot Lake only about 2.6 lbs is usable. The other 1997.4 lbs are discarded. These are mill tailings. Currently there are over 80 million tons of these radioactive tailings lying in huge mounds on the ground in Elliot Lake.

These tailings contain 85% of the radioactivity of the uranium ore. They contain large quantities of thorium which has a half-life of 80,000 years. Thorium decays to radium. Radium 226 is one of the most toxic radioactive substances known to man. It is most dangerous if ingested through food or water. It accumulates in the bones where it can cause bone cancer and other other disorders including leukemia. It can be concentrated by biological organisms. Radium decays to radon gas.

Radon gas is a very heavy gaseous element with a half-life of approximately 3.8 days. Because of its weight it lies close to the ground and is carried by the wind. Depending on wind speed and atmospheric conditions radon gas is capable of being carried up to a thousand miles in its short life time. In the Elliot Lake area, uranium mine tailings have contaminated the entire Serpent River system (about a dozen lakes) so that the water is not fit for human use. There are no fish living in the entire 55 mile stretch downstream from the mining operations. (SOURCE: "Status Report on the Serpent River System", Ontario Ministry of the Environment, 1976) Randon gas is an alpha emitter. It causes lung cancer. Victor Gilinski of the U.S. Nuclear Regulatory Commission stated in September 1979 that the considerable hazards of radon gas have been greatly underestimated.

New contracts signed recently between the Ontario Government and Rio Algom and Dennison mines will lead to another 200 million tons of tailings being dumped at Elliot Lake. These companies have been absolved of any responsibility for cleanup.

TRANSPORTATION OF NUCLEAR FUEL WASTE

There currently exists at nuclear reactor sites in Ontario over 3000 tonnes of nuclear fuel waste in interim storage. If and when a disposal facility is established these wastes plus future accumulations must be transported from reactor site interim storage to the disposal facility. This will be accomplished by containing the radioactive waste in 50 tonne shipping flasks.

According to the booklet "TRANSPORTATION OF NUCLEAR FUEL" (this is the booklet withdrawn from circulation in late Feb. 1980) a container must be capable of withstanding a series of qualifying tests "each potentially more destructive than any accident situation".¹ However the demonstration of this capability is often performed using scaled models of the shipping container. The qualification tests require that the container of scale model be subjected to:

Claim on waste leaks wrong, nuclear agency recalls report

OTTAWA (CP) — Atomic Energy of Canada Ltd. is recalling all copies of a report containing a false claim that none of the company's shipments of nuclear waste have leaked in accidents, Brad Franklin, a company spokesman, said yesterday.

"It was an error. We apologize," Mr. Franklin said.

An accident report made public this week by the Atomic Energy Control Board said there have been at least 135 nuclear transport incidents between 1947 and 1978. One incident listed involved a shipment of nuclear waste from the AECL in 1960.

The board regulates the nuclear industry.

AECL spokesman have repeatedly denied that the Crown corporation has had any accidents while transporting nuclear waste and a 1979 publication said "to date, there have been no recorded instances of radioactive release associated with used-fuel shipment accidents."

Mr. Franklin said the publication — "Transportation of Nuclear Fuel" by D.R. Prowse, an employee involved in safety analysis of nuclear reactor facilities — was being taken off

AECL shelves and the correct information would be circulated in its place.

He said the error was probably made because AECL officials who reviewed the report were not familiar with the incident.

The incident involved a shipment from Chalk River in the Ottawa Valley to South Carolina during which radioactive water was spilled in a railyard in Baltimore. Mr. Franklin said there was no "unilateral exposure" of any people to the Maryland spill and it was probably forgotten quickly.

The AECL report said that of the 135 incidents "27 per cent resulted in increased radiation (greater than one rem per hour at one metre), leakage, or separation of the radioactive material from the packaging."

Under board standards, the maximum amount of radiation a person should be exposed to in a year is 0.5 rems, a rem being a standard measurement of radiation.

At least four accidents described in the report resulted in leakage from containers described by AECL as crash-proof.

In 1962, during a 14-day journey from AECL's Otta-

wa plant to Hoboken, N.J., one of the crash-proof containers began emitting a powerful beam of gamma radiation at 50 roentgens an hour.

"Approximately 65 people may have been exposed to the radiation from the package," the report said.

"The incident was the result of faulty packaging procedures and vibration during the normal course of transport. No external damage to the container was evident," Mr. Franklin said the container has since been modified.

A truck driver who showed blood changes after exposure to radiation in that incident is still being watched by medical officials, he said.

Board president Jon Jennekens said he was aware AECL has sometimes misinformed the public about the safety record of the nuclear industry but the board "has no control over what they (AECL) say to people."

Mr. Jennekens said information about the nuclear industry's safety record should become clearer when the board's new policy of making public certain industry documents goes into effect May 1.

1. A freefall from a height of 9 metres onto an unyielding surface.
2. A freefall of 1.3 metres.
3. A thermal test of 800°C for 30 minutes. This is accomplished by either complete immersion in a hydrocarbon fire, or by insertion in a large furnace.²

AECL admits to 135 nuclear transport accidents

OTTAWA (CP) — The Atomic Energy Control Board, which recently acknowledged there were at least 135 nuclear transport accidents between 1947 and 1978, is revising its regulations on transporting radioactive material by road.

John Beare, director of the board's safeguards and nuclear materials branch, said Thursday a draft of new regulations will probably be released for public comment in a few months.

There are currently no regulations specifically governing the movement of radioactive materials by road. The board has instead applied rail regulations, which Beare said have been sufficient in controlling technical aspects of

the Ottawa Valley where there are frequent shipments of nuclear material from Atomic Energy of Canada Ltd. (AECL) installations at Chalk River, about 180 kilometres west of Ottawa.

Ottawa officials have been pressing nuclear officials to notify them when radioactive shipments pass through the area.

Various nuclear spokesmen have expressed different opinions on the value of alerting communities along nuclear transport routes.

Beare told an Ontario legislature committee this week such a practice would be a waste of time and an administrative burden. When

packaging and transport.

But responsibility for rail and road fall under two different government branches and new regulations would "clean up messy administration problems" such as who to deal with in case of an accident.

The Canadian Transport Commission is responsible for rail transport and the board is responsible for roads.

The board, the federal agency which regulates the nuclear industry, has been involved recently in a debate on the safety of transportation of radioactive material.

The question of safety has been important in municipalities were notified in the past, the information was usually filed away and forgotten, he said.

However, Stan Hatcher, general manager of AECL's Whiteshell nuclear research establishment in Manitoba, said informing municipal officials about the details of radioactive shipments would help improve safety.

Beare said the review of road regulations is part of an overall review of regulations.

Other regulations will probably be revised the next time the International Atomic Energy Agency revises its standards, he said.

These flasks in tests by Sandia Laboratories of the U.S. have been:

1. dropped 610 metres from helicopters onto prairie hardpan.
2. carried by tractor-trailer rigs which crash into massive concrete barriers at 100 and 130 km/hour.
3. struck broadside while mounted on a tractor-trailer by a locomotive.³

The containers retained their integrity.

In TRANSPORTATION OF NUCLEAR FUEL there are four suggested actions to be taken prior to shipping spent reactor fuel,

1. Informing police along shipment route that such a shipment is being made.
2. Labelling the shipment with appropriate warning signs.
3. Equipping the truck with a two-way radio and where possible making direct contact between the shipment and monitoring stations.
4. Ensuring that emergency response teams are available and on continuous standby both at the reactor shipment site and at the reception centre.

The booklet goes on to state that out of 500 shipments made in Canada, only one accident occurred, a minor one with

no release of radioactivity and out of 4000 shipments in the U.S. only one accident occurred and again there was no release of radioactivity. The booklet was taken out of circulation when the AECB acknowledged there have been 135 nuclear transport accidents with 27% resulting in increased radiation, leakage or separation of the radioactive material from the packaging. In a 1962 accident involving an AECL shipment of radioactive waste "approximately 66 people many have been exposed to the radiation from the package."⁴

The Public Interest Research Group in Michigan (PIRGIM) has been very critical of the transport flasks. They note that:

1. the casks are not tested for high velocity impact against curved objects such as bridge abutments.
2. the casks are not tested for impalement at substantial velocity.
3. the casks are tested to withstand temperatures up to 1474° F (800° C) for half an hour however at least eleven substances including benzene, propane and toluene which are routinely shipped by rail and highway can reach temperatures of 4275° F (2357° C).⁵

The Association of American Railroads, during U.S. Senate hearings in 1974 pointed out that rail accidents can and do take place in which more energy or longer fires are involved than assumed in the certification and testing process.

Poor track conditions would be another concern particularly in remote, rugged areas of rough terrain and where tracks border lakes or rivers. Temperature extremes as are found in Northern Ontario expand and contract rails loosening and heaving them.

These rails are inspected once or twice annually. Canada currently averages about one rail accident per day.

These fifty tonne containers are capable of transporting about 3.5 tonnes of radioactive waste. Because of the intensely radioactive nature of this material nothing less than total containment is acceptable. The ensuring of emergency response teams at the reactor shipment site and at the reception centre would be of little value to residents of Chapleau if there is an accident in that town and shipment is coming from Bruce Nuclear Generating Station and is bound for say, Atikokan, Ontario.

Tues Feb 5, 1980
**No Leak
For 20 Yrs.**

TORONTO (CP) — Chalk River Nuclear Laboratories has been shipping enriched nuclear fuel to and from the U.S. for 20 years and there has never been any leak of radioactive material, a laboratory spokesman says.

Hal Tracy, public affairs spokesman, said Thursday in a telephone interview from Chalk River, Ont., that the 18-to 20-ton lead containers used to haul radioactive material are virtually impregnable.

Tracy was responding to reports that Ralph Nader's public affairs group has found that a company contracted to haul waste through Eastern Ontario this year had more accidents involving nuclear material than any other shipping company in the U.S. between 1974 and 1978.

Recently, Tri-State Motor Transit won a contract to haul 14 loads of radioactive waste 1,866 kilometres from experimental nuclear reactors operated by Atomic Energy of Canada Ltd. at Chalk River, near Pembroke, to a reprocessing plant in South Carolina.

Tracy said the containers used to ship the waste must conform to regulations set by the Atomic Energy Control Board.

He said the containers are subjected to numerous tests, including being dropped from a height of about 10 metres, immersion in water for 24 to 48 hours and severe fire tests.

A company recently contracted to haul 14 loads of radioactive waste for AECL has a deplorable safety record. Tri-State Motor Transit had 152 accidents while transporting atomic materials in a 4 year period. Ontario Public Interest Research Group found there were 328 accidents over the four year period and 118 involved partial or complete spills.

Notices of radioactive shipments would be ineffective, AECB says

Telling communities when large shipments of radioactive material will pass through them would be futile because the notices would just gather dust, according to Canada's nuclear regulatory agency.

Before 1970, health and highway authorities were informed of large radioactive shipments by the Atomic Energy Control Board, a Legislature select committee was told yesterday.

"Then we checked with

the authorities to see what they did with them and they'd just filed them," said J. W. Beare, AECB's director of safeguards.

He said it would be "a tremendous administrative burden" to notify area officials. "I just don't think they'd do very much with the information."

Mr. Beare acknowledged the public might be happier if communities were notified, "but that would be

sort of a cosmetic move in my view. Public relations has no impact on safety, favorable or unfavorable."

"You say you want security, yet you don't warn a fire department or emergency task force if they're coming through that community," said Liberal MP Ray Haggerty.

"I think your program's full of loopholes — you're going to have to tighten it up."

What happens in the event of accident which results in a spill? In discussing shipments of low-level radioactive sludge from Eldorado Nuclear, Irving McIntyre director of the Ministry of the Environment's northeastern region has said "You'd cordon off the area I suppose."⁶

At present there are no regulations specifically governing the movement of radioactive materials by road so rail regulations have been applied. Because rail and road responsibilities fall under two different government branches the AECB believes new regulation will "clean up messy administration problems"⁷ in the event of an accident.

1. Dr. D.R. Prowse, TRANSPORTATION OF NUCLEAR FUEL (AECL-6331, Jan. 79) pg. 5.
2. Ibid. Dr. D.R. Prowse
3. Ibid. Dr. D.R. Prowse
4. Ibid. Dr. D.R. Prowse
5. Ralph Nader & J. Abbots, The Menace of Atomic Energy, G.J. McLeod Ltd., Toronto, 1977.
6. Globe & Mail, Toronto, February, 1980.
7. Northern Daily News, Kirkland Lake, February 29, 1980.

On February 28th, 1977, eight top officials of AECL spent an entire day in Ottawa briefing senior civil servants on the details of what they called their "Proposed Canadian Fuel Cycle Centre". Ross Campbell, chairman of AECL opened the meeting by saying:

"We would not have asked you to set aside a whole day if we had not considered the subject matter....the proposed Canadian fuel cycle program and the associated question of waste management.....to be both important for Canada's energy future and urgent. The separation, and use, of plutonium would be a long range job requiring careful planning and research. We are already late in starting to bring this new energy source on stream in the critical last decade of this century when real shortages of energy will appear."

Later, in the seminar, Ms Hatcher of AECL explained further:

"We must learn how to reprocess fuels to recover the valuable materials plutonium, Uranium - 233, and thorium.....

We have shown the design of this (pilot reprocessing plant) starting this year (1977) and operational by 1981.....

It's first priority would be to test the reprocessing of thorium.....

This is an extremely tight schedule and the timing is critical.....

We need a start this year on a pilot plant for reprocessing.....

Any delays in committing the first phase of this program will lead to similar delays in completion."

The total cost of this program is to be between 1.5 and 2 billion dollars.

On June 8th, 1979 the Science Council of Canada recommended the allocation of 2.2 billion dollars in federal funds to AECL for reprocessing research.

On March 8, 1980, the Toronto Star carried a front page story headlined 'Deadly Atomic Fuel to be Flown Over Canada'. The story discloses how shipments of plutonium will be flown into Canada to be used in plutonium fuel cycle research at Chalk River.

It is obvious AECL is embarking on the road to a plutonium future, however; they have not been anxious to make this news public. In 1977, only weeks after the Ottawa seminar, AECL neglected to mention their plans before the Royal Commission on Electric Power Planning (Porter Commission). It became public knowledge only after the Toronto Star learned of AECL's plans and spilled the proverbial beans.

At the Ottawa seminar Mr Hatcher also said:

"AECL believes that our major long term program should be development, and demonstration, of fuel recycle and disposal of radioactive wastes."

He continued:

"I have not said much about the waste disposal aspect. This is not because it is not important, it is extremely important, but it is a part of the total program. It cannot be disassociated from the fuel cycle program....."

Admittedly, a positive decision with respect to the back end of the fuel cycle (reprocessing) today takes a certain amount of guts because authorities all over the world are proceeding with understandable caution in the face of the bad name undeservedly attached to plutonium.....but plutonium is an extremely useful material and we will be dealing in it."

The Hare Report also points out that all waste disposal plans in Canada have been made on the assumption that reprocessing would take place.

Despite AECL's low key approach to reprocessing it has been a foregone conclusion that the reprocessing will be located at the disposal site.

An Ontario Hydro Report No GP76014 states:

"It is proposed to have all facilities associated with irradiated fuel management (interim storage facility, reprocessing facility, and ultimate disposal) located at one site."

The reasons cited are:

- 1) ease of radioactive releases control

- 2) minimization of transportation risk
- 3) minimization of security and safeguard problems.

WHAT IS WRONG WITH REPROCESSING:

The following is taken from a report compiled by Dr Gordon Edwards.

Separating plutonium from spent fuel is a dangerous and dirty business. First, the spent fuel is chopped up, by remote control, behind heavy lead shielding. These chopped up pieces are then dissolved in boiling nitric acid releasing radioactive gases in the process. The plutonium is separated from the acid solution by chemical means leaving large quantities of high-level radioactive liquid waste and sludge behind. After it has cooled down for several years this liquid waste will have to be solidified for ultimate disposal while the separated plutonium is fabricated into nuclear fuel or nuclear weapons.

Reprocessing plants around the world have exhibited poor records of occupational safety; pollution control; waste containment; and security. For example: at the Hanford military plutonium reprocessing plant in Washington State, over a million gallons of high-level liquid waste has escaped from steel-and-concrete tanks into the soil. One gallon of this waste is enough to ruin an entire city's water supply. Hanford workers have also shown a significant increase in the incidence of cancer. In Russia, an explosion involving high-level liquid waste contaminated hundreds of square miles and hospitalized thousands of people. In the U.K., a small explosion in 1973 occurred at a reprocessing plant and radioactive effluents have been substantial. In the U.S. large quantities of plutonium are missing and "unaccounted for"....enough to make several hundred atomic bombs.

"Somehow, it has been decided that
irretrievable geological disposal
is the best compromise between
safety and responsibility objectives."

Dr. P. Lyne, 1975
(Architect of Canada's Waste
Disposal Program)

ACCORDING TO THE MANAGEMENT OF RADIOACTIVE FUEL WASTES: THE CANADIAN DISPOSAL PROGRAM, AECL'S PUBLIC RELATIONS BOOKLET, "THE BASIC CONCEPT OF GEOLOGIC DISPOSAL OF RADIOACTIVE MATERIALS IS TO CONTAIN AND ISOLATE THE MATERIALS FOR THEIR HAZARDOUS LIFE BY BURIAL IN STABLE UNDERGROUND FORMATIONS."¹

THE DISPOSAL FACILITY WOULD RESSEMBLE, IN MANY RESPECTS, A MINE. A VERTICAL SHAFT. CHAMBERS WOULD BE EXCAVATED OFF THE TUNNELS AND "SUITABLY-PACKED RADIOACTIVE WASTE PLACED IN HOLES IN THE FLOOR. WHEN FULL, THE ROOMS (AND EVENTUALLY THE MINE) WOULD BE BACKFILLED AND SEALED."²

THE SUITABLE PACKAGING OF THESE WASTES IS DEPENDENT ON TWO OPTIONS THE INDUSTRY HAS, THAT OF CONTAINING IRRADIATED FUEL BUNDLES AS THERE ARE WHEN REMOVED FROM THE REACTOR OR INTERIM STORAGE POOL AND THE OTHER OF CONTAINING RADIOACTIVE WASTE MATERIAL WHICH IS THE RESULT OF REPROCESSING. AECL ADMITTEDLY DOES NOT HAVE ALL OF THE ANSWERS REGARDING EITHER CONTAINMENT OPTION.

IN THE "CANADIAN DISPOSAL PROGRAM," IT IS STATED THAT "IT MAY ONLY BE NECESSARY TO PLACE THE IRRADIATED FUEL BUNDLES IN A SIMPLE, SEALED CONTAINER CONSTRUCTED OF A CORROSION-RESISTANT MATERIAL WOULD PROVIDE ADDITIONAL PROTECTION AGAINST THE INGRESS OF WATER."³

THE OTHER OPTION INVOLVES GLASSIFICATION. THIS IS A PROCEDURE WHICH TAKES PLACE ONLY ON MATERIALS WHICH ARE THE RESULT OF REPROCESSING, THAT IS THE WASTE LEFT PLUTONIUM AND URANIUM 235 HAVE BEEN EXTRACTED FROM THE IRRADIATED FUEL BUNDLES. THE MAIN CANADIAN STUDY ON WHICH THE SUCCESSFUL CONTAINMENT OF WASTE IN GLASS IS BASED, INVOLVED THE PLACING OF GLASSIFIED WASTE IN SAND AT CHALK RIVER IN 1958 AND 1960 AND RETRIEVING OF IT IN 1979.

THE INTERGOVERNMENTAL CO-ORDINATING COMMITTEE CONSISTS OF AN AECL CHAIRMAN AND REPRESENTATIVES FROM ONTARIO HYDRO, THE ONTARIO MINISTRY OF ENERGY AND THE FEDERAL DEPARTMENT OF ENERGY, MINES AND RESOURCES.

ACCORDING TO AECL TENTATIVE SCHEDULE BEING USED FOR PLANNING PURPOSES IS:

1978-80 GEOLOGICAL SURVEY WORK, EXPERIMENTAL DRILLING AND ACCELERATED RESEARCH AND DEVELOPMENT

1981-83 SITE SELECTION FOR DEMONSTRATION REPOSITORY

1983 SITE ACQUISITION

1985-2000 DISPOSAL DEMONSTRATION PROGRAM

2000, FULL SCALE FACILITIES OPERATIONAL⁴

THE MANAGEMENT OF RADIOACTIVE FUEL WASTES: THE CANADIAN DISPOSAL PROGRAM, REFERS THE READER TO "THE MANAGEMENT OF CANADA'S NUCLEAR WASTES" BETTER KNOWN AS THE HARE REPORT, FOR FURTHER ELABORATION ON AECL'S WASTE DISPOSAL PROGRAM.⁵

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"Excessive optimism about the potential for safe disposal of nuclear wastes has caused backers of nuclear power to ignore scientific evidence pointing to its pitfalls."

"That's the real crux of what we found -- that you have to weigh scientific evidence against essentially engineering euphoria."

Commissioner Emilio Varanini
California Energy Commission
Los Angeles Times, Jan. 12, 78

THANKS TO THE NUCLEAR INDUSTRY NORTHERN ONTARIO CURRENTLY POSSESSES ONE OF THE MOST SERIOUS ENVIRONMENTAL PROBLEMS IN CANADA, THE 80 MILLION TONS OF RADIOACTIVE TAILINGS AT ELLIOT LAKE WHICH CONSTANTLY RELEASE CANCER CAUSING RADON GAS INTO THE ENVIRONMENT.

AECL AND ONTARIO HYDRO WOULD HAVE NORTHERN ONTARIO BEAR THE BURDEN OF ANOTHER POTENTIALLY DEVASTATING ENVIRONMENTAL HAZARD BY THE TRANSPORT TO, AND DISPOSAL OF, HIGH LEVEL SPENT NUCLEAR FUEL IN THE NORTH.

AN ILL-CONCEIVED OR IMPROPERLY CONDUCTED PROGRAM OR THE ACTIVITY OF SOME UNKNOWN PHENOMENON COULD RESULT IN WHAT COMMISSIONER EMILIO VARANINI, OF THE OF THE CALIFORNIA ENERGY COMMISSION CALLS "CATASTROPHIC REPOSITORY FAILURE" CAPABLE OF BRINGING RADIOACTIVITY LEVELS INTO THE ENVIRONMENT UP TO 10,000 TIMES THAT OF BACKGROUND LEVELS."⁶

THERE ARE MANY CRITICS OF THE CANADIAN DISPOSAL PROGRAM. SOME, SUCH AS DR. JOHN CHERRY AND DR. JOHN GALE OF THE UNIVERSITY OF WATERLOO, ARE UNDER CONTRACT TO AECL, TO DO RESEARCH IN THE HYDROGEOLOGY OF CRYSTALLINE ROCK FORMATIONS.

THEY HAVE SAID, "THERE IS NO POINT IN ENTERING INTO A SERIOUS SITE-SEARCH PHASE UNTIL MORE IS KNOWN ABOUT THE THERMAL-MECHANICAL AND HYDROGEOLOGICAL PROPERTIES OF THE VARIOUS ROCK TYPES UNDER CONSIDERATION. IT IS UNREALISTIC TO EXPECT TO OBTAIN DEFINITIVE DATA FROM BOREHOLES UNTIL BOREHOLE TESTING IS MUCH MORE ADVANCED. DRILLING AND TESTING OF BOREHOLES ARE, OF COURSE, NECESSARY ENDEAVOURS, BUT IT IS TOO SOON TO DECIDE ON THE OVERALL VALUE THAT THEY HAVE IN THE PROGRESSION TOWARDS IDENTIFICATION OF SUITABLE ROCK MASSES FOR REPOSITORY DEVELOPMENT - THERE IS A SHORTAGE OF SCIENTIFIC MANPOWER TO DO COMPLETE RESEARCH AT THIS TIME. RESEARCH SHOULD BE DONE WITHIN A SCHEDULE BASED ON SCIENTIFIC REALITIES RATHER THAN ON SHORT-TERM POLITICAL EXPEDIENCY."⁷

DR. JOHN GALE AND DR. JOHN CHERRY DETAIL THE HYDROGEOLOGIC PROBLEMS IN SITING A NUCLEAR WASTE REPOSITORY. THEY DISCUSS THE POSSIBILITY OF GROUNDWATER FLOW PROVIDING A PATHWAY FOR THE MIGRATION OF RADIONUCLIDES FROM THE REPOSITORY AREA TO THE BIOSPHERE AND "THE POSSIBILITY OF SIGNIFICANT PERTURBATIONS OF THE ROCK MASS AND THE GROUNDWATER FLOW SYSTEM BY THE THERMAL-MECHANICAL LOADS INDUCED BY HEAT FROM THE DECAYING WASTE AND BY THE DEVELOPMENT OF THE EXCAVATION"⁸

THEY STATE THAT "A MAJOR PROBLEM CONFRONTING HYDROGEOLOGISTS IS TO DETERMINE THE GROUNDWATER FLOW CONDITIONS IN FRACTURED CRYSTALLINE OR ARGILLACEOUS ROCKS PRIOR TO MINING AND TO PREDICT WHAT THE FLOW CONDITIONS WILL BE LONG AFTER THE REPOSITORY IS CLOSED."⁹

"IT MUST BE EMPHASIZED HOWEVER THAT THE HYDRAULIC CHARACTERISTICS OF FRACTURED CRYSTALLINE AND METAMORPHIC ROCKS HAVE NOT BEEN STUDIED IN ANY DETAIL. ALMOST NO STUDIES HAVE BEEN UNDERTAKEN OF DEEP FLOW SYSTEMS IN FRACTURED CRYSTALLINE ROCK MASSES.

REALISTIC NUMERICAL MODELS FOR FRACTURE FLOW AND FOR RADIONUCLIDE TRANSPORT IN FRACTURE NETWORKS MUST BE DEVELOPED TO YIELD THE NEEDED CONFIDENCE IN ANALYSIS OF THESE SYSTEMS. TO PUT IT SIMPLY, THE PROBLEM OF DETAILED ANALYSIS OF FLOW IN FRACTURED CRYSTALLINE ROCK IS AN EXCEPTIONALLY DIFFICULT ONE

GIVEN THE PRESENT HYDROGEOLOGICAL UNCERTAINTIES NOTED ABOVE, THE PRESENT SCHEDULE FOR REPOSITORY SITE SELECTION AND DEVELOPMENT IS UNJUSTIFIABLE ON SCIENTIFIC GROUNDS... THIS TENTATIVE SCHEDULE FAILS TO RECOGNIZE THE NATURE AND MAGNITUDE OF THE HYDROGEOLOGICAL SEGMENT OF THE PROBLEM, AND AS WELL FAILS TO RECOGNIZE THE CURRENT PAUCITY OF KNOWLEDGE AND AVAILABLE EXPERTISE WITH REGARD TO THE HYDROGEOLOGY OF DEEP ROCK MASSES... THERE IS LITTLE INDICATION THAT GOVERNMENT AGENCIES RESPONSIBLE FOR REPOSITORY SEARCH AND DEVELOPMENT HAVE DEVELOPED A REALISTIC VIEW OF THE HYDROGEOLOGICAL SEGMENT OF THE PROGRAM.¹⁰

DR. CHERRY AND DR. GALE MAKE A NUMBER OF RECOMMENDATIONS THE FIRST OF WHICH IS A "GO-SLOW" PROGRESSION TOWARDS SITE SELECTION, DELAYING IT 5 TO 10 YEARS. THEY SUGGEST STUDIES BE DONE ON A SITE (VIRGIN SITE STUDIES) WHICH WILL NOT BECOME A

REPOSITORY THUS ALLOWING THE SITE TO BE DRILLED AND INSTRUMENTED IN A MANNER WHICH WOULD NOT BE APPROPRIATE FOR AN ACTUAL REPOSITORY.

THEY CONCLUDE THAT "WITH PUBLIC RELATIONS CONSIDERATIONS ASIDE, WE ARE AWARE OF NO SCIENTIFIC REASONING (OTHER THAN MINING CONVENIENCE) THAT WOULD LEAD AT THIS TIME TO THE CONCLUSION THAT PLUTONIC CRYSTALLINE ROCK IS THE ONLY ROCK TYPE WORTHY OF A SIGNIFICANT LEVEL OF RESEARCH IN THE CANADIAN PROGRAM. A THICK SEQUENCE OF PALLOZOIC SEDIMENTARY ROCKS, WITH APPRECIABLE THICKNESSES OF SALT AND SHALE EXIST IN SOUTHERN ONTARIO VERY CLOSE TO EXISTING NUCLEAR POWER CENTRES... THERE IS NO REASON TO BELIEVE THAT THERE IS A BETTER CHANCE FOR FINDING A SUITABLE ROCK MASS AT A REMOTE SITE IN NORTH-CENTRAL ONTARIO THAN THERE IS IN SOME PART OF THE PALLOZOIC STRATOCRAPHIC SEQUENCE IN SOUTHERN ONTARIO."¹¹

CHRIS BARNES, HEAD OF THE UNIVERSITY OF WATERLOO'S EARTH SCIENCES DEPARTMENT SAID IN TESTIMONY BEFORE THE SELECT COMMITTEE ON ONTARIO HYDRO AFFAIRS THAT IT IS A DISGRACE THAT CANADA HAS NOT SPENT MORE MONEY ON WASTE DISPOSAL. HE CALLED THE \$13.5 MILLION SPENT IN 1979 INSIGNIFICANT. ACCORDING TO MR. BARNES, PAST-PRESIDENT OF THE CANADIAN GEOSCIENCE COUNCIL, THE CURRENT PROGRAM AIMED AT PROVING WASTE CAN BE BURIED UNDERGROUND IN GRANITE CANNOT BE CHECKED AND PLACES THE SCIENTIFIC COMMUNITY IN AN IMPOSSIBLE SITUATION.

THE GEOSCIENCE COUNCIL BELIEVES CHECKS AND BALANCES MUST BE INTRODUCED TO ENSURE THE SYSTEM DEVELOPED BY AECL IS SAFE. BARNES CRITICIZED AECL FOR NOT PUBLISHING ITS WORK IN SCIENTIFIC JOURNALS WHERE IT COULD BE EVALUATED.

DR. GORDON EDWARDS IN, NUCLEAR WASTES -- WHAT, ME WORRY?, CLEARLY ILLUSTRATES NUMEROUS ERRORS AND OMISSIONS IN THE HARE REPORT WHICH AECL REFERS TO AS A SOURCE OF WASTE DISPOSAL INFORMATION.

THE HARE REPORT (EMR REPORT EP77-6) WAS COMMISSIONED ACCORDING TO THEN MINISTER ALASTIR GILLESPIE, BY THE DEPARTMENT OF ENERGY, MINES AND RESOURCES, "TO PROVIDE THE GOVERNMENT AND THE PUBLIC OF CANADA WITH THE VIEWS OF AN INDEPENDENT EXPERT GROUP ON THE SUBJECT OF NUCLEAR WASTE DISPOSAL."

HOWEVER ONLY ONE OF THE THREE MEMBERS ON THE COMMITTEE, DR. AIKEN HAD ANY PREVIOUS ASSOCIATION WITH THE NUCLEAR INDUSTRY AND THAT IN THE CAPACITY OF VICE-PRESIDENT OF AECL. PREVIOUS TO BEING NAMED TO THE COMMITTEE DR. AIKEN HAD SUGGESTED THAT "WASTE DISPOSAL IS NOT A TECHNICAL PROBLEM BUT A PUBLIC RELATIONS PROBLEM."¹²

ANOTHER MEMBER OF THE COMMITTEE DR. KENNETH HARE IN TESTIMONY BEFORE THE PORTER COMMISSION, STATED THAT THE COMMITTEE SHOULD NOT BE CONSIDERED AS A "PANEL OF EXPERTS" AND THAT WERE IT NOT FOR THE LEADERSHIP AND EXPERTISE OF DR. AIKEN THE STUDY GROUP WOULD HAVE BEEN UNABLE TO CARRY OUT THEIR ASSIGNMENT.

ALL THREE PANEL MEMBERS (DR. MUM HARRISON BEING THE THIRD) HAVE DECLARED THEMSELVES AS BEING ENTHUSIASTICALLY PRO-NUCLEAR. THE COMMITTEE WAS NEITHER "INDEPENDENT NOR EXPERT", AND AS DR. EDWARDS INDICATES IT IS DIFFICULT TO DISCERN IF THE REPORT IS A TECHNICAL OR A PUBLIC RELATIONS DOCUMENT. THE PANEL SPENT LESS THAN 4 MONTHS LOOKING INTO THE QUESTION OF WASTE DISPOSAL AND CONCLUDED THAT:

- "1. THERE IS AN URGENT NEED TO DEMONSTRATE A METHOD FOR SAFELY DISPOSING OF HIGH-LEVEL RADIOACTIVE WASTES IN A PERMANENT AND IRRETRIEVABLE FASHION.
2. THERE IS NO REASON WHY CANADA'S PLANS FOR MASSIVE EXPANSION OF THE NUCLEAR INDUSTRY SHOULD BE DELAYED PROVIDED WORK IS BEGUN IMMEDIATELY ON SOLVING THE WASTE DISPOSAL PROBLEM."¹³

THE STUDY GROUP DID NOT CONTACT THE CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION WHICH PUBLISHED A SUBSTANTIAL INTERIM REPORT ON NUCLEAR WASTE DISPOSAL AND REPROCESSING NOR DID THEY CONTACT THE UNION OF CONCERNED SCIENTISTS IN MASSACHUSETTS WHO HAVE PUBLISHED THE BOOK THE NUCLEAR FUEL CYCLE WHICH IN PART DEALS WITH WASTE DISPOSAL. AS DR. HARE HAS SAID "WE SIMPLY VISITED THE PRINCIPAL CENTERS OF RESEARCH, READ THE LITERATURE AND DISCUSSED IT AMONGST OURSELVES."

BASED ON THE INTENSIVE STUDY OF NUCLEAR WASTE DISPOSAL CONDUCTED BY THE

CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION THE STATE OF CALIFORNIA IS NOT LICENSING NEW NUCLEAR FACILITIES.

ACCORDING TO M. WILLATCH ET AL IS CITED IN THE CALIFORNIA INTERIM REPORT, "SHORT TERM DEMONSTRATIONS OF PERMANENT WASTE REPOSITORIES CAN SHOW THAT RADIOACTIVE WASTES CAN BE SAFELY EMPLACED IN GEOLOGIC FORMATIONS BUT LITTLE MORE."

WITHOUT AN APPRECIATION OF THE ENORMOUS TOXICITY OF NUCLEAR FUEL WASTE IT IS IMPOSSIBLE TO ARRIVE AT A REALISTIC ASSESSMENT OF THE RISKS INVOLVED IN STORING THEM SAFELY FOR UP TO A MILLION YEARS. ONE MEDIUM SIZED REACTOR PRODUCES MORE RADIOACTIVE GARBAGE IN ONE YEAR THAN WOULD RESULT FROM THE DETONATION OF A THOUSAND HIROSHIMA BOMBS. THIS WASTE MUST BE CONTAINED TO THE 99.99 PERCENTAGE LEVEL VIRTUALLY FOREVER.

SOME OF THE PROBLEMS WHICH EXIST IN GEOLOGIC DISPOSAL INCLUDE:

1. DISSIPATION OF THE GREAT QUANTITIES OF HEAT AT A RATE RAPID ENOUGH TO PREVENT OVERHEATING OF THE DISPOSAL CHAMBERS.

OVERHEATING COULD RESULT IN FRACTURING IN THE ROCK CREATING PATHWAYS FOR THE ENTRY OF WATER. ROCK IS NOT A GOOD CONDUCTOR OF HEAT AND COULD SUFFER THERMAL FATIGUE.

THE BUILDUP OF HEAT COULD RESULT IN CHEMICAL REACTIONS OCCURRING BETWEEN THE WASTE AND THE MINERALS IN THE HOST ROCK.

2. BREAKDOWN OF THE CONTAINERS ENCLOSING THE WASTE. IN THE CASE OF WASTE RESULTING FROM REPROCESSING THIS WOULD BE A GLASS OR CERAMIC. U.S. AUTHORITIES NOW ASSUME ANY CONTAINMENT WILL LAST NO MORE THAN A CENTURY.

3. FRACTURES EXISTING IN THE HOST ROCK OR CREATED DURING DRILLING AND EXCAVATING. THE QUESTION IS HOW DO YOU GET WASTES INTO AN UNDISTURBED GEOLOGICAL FORMATION WITHOUT DISTURBING IT. GRANITE IS A VERY BRITTLE ROCK READILY SUBJECT TO FRACTURING AND FAULTING.

THESE ARE SOME OF THE PROBLEMS AECL'S WASTE MANAGEMENT RESEARCH PROGRAM IS ADDRESSING. HOWEVER AS INDICATED BY THE GEO SCIENCE COUNCIL, MANY MORE YEARS OF RESEARCH IS REQUIRED AND THE AECL RESEARCH TIME FRAME IS UNREALISTIC.

AMONGST THE POSSIBILITIES FOR REPOSITORY FAILURE EXISTS THAT OF THE CREATION OF A RADIOACTIVE GEYSER BY THE INTRODUCTION OF WATER INTO THE DISPOSAL VAULT AND THE GENERATING OF STEAM BY THE 'HOT' WASTES. PRESSURE COULD BUILD UP AND WOULD EVENTUALLY HAVE TO VENT. THE PATH OF LEAST RESISTANCE IN A PLUTON WOULD LIKELY BE BACK UP THE SHAFT.

1 J. BOULTON, MANAGEMENT OF RADIOACTIVE FUEL WASTE:THE CANADIAN DISPOSAL PROGRAM, AECL-6314, 1979, OCTOBER

2 Ibid, J. Boulton

3 Ibid, J. Boulton

4 Ibid, J. Boulton

5 DR. MJM HARRISON, DR. A. AIKIN & DR. D. AHRE, HARE REPORT, ENERGY, MINES AND RESOURCES, 1977.

6 COMMISSIONER E. VARININI, INTERVIEW ON CANADA A.M. CFTO TV, TORONTO, FEB.5.80

7 CANADIAN GEOSCIENCE COUNCIL, DISPOSAL OF HIGH LEVEL RADIOACTIVE WASTE:THE CANADIAN GEOSCIENCE PROGRAM, PAPER 79-10, 1979

8 Ibid, CCC paper 79-10,1979

9 Ibid, CCC paper 79-10, 1979

10 Ibid, CCC paper 79-10

11 Ibid, CCC paper 79-10

12 DR. G. EDWARD, NUCLEAR WASTES--WHAT, ME WORRY?, CANADIAN COALITION FOR NUCLEAR RESPONSIBILITY, FEB. 1978

13 DR. MJM HARRISON, DR. A. AIKIN & DR. D. HARE, HARE REPORT, E.M.R. 1977

"The government will not be bound by
opposition from citizens, town officials
or regional representatives. There is
no law one way or the other."

Maldon Rowan, Deputy Minister of Energy
(in testimony to the Select Committee
on Hydro Affairs)
Toronto Globe and Mail, Feb. 8.80

They also involve considerable money to assuage public concern about safety by quoting the U.S. government commissioned Rasmussen Report which has been repudiated by the U.S. Nuclear Regulatory Commission and they have attempted to dismiss alternatives, solar in particular, by quoting the AECB commissioned Innhaber Report, THE RISK OF RENEWABLE ENERGY RESOURCES. Dr. John Holmgren of University of California, Berkely has said, "The Innhaber Report is by far the most incompetent technical document I have ever known to have been distributed by grown-ups." Paul Moray of Ontario Public Interest Research Group at Trent University, Peterborough has called the Innhaber Report "the standard joke in first year statistic courses".

Atomic Energy of Canada Ltd. (AECL) also distributes a booklet entitled "Energy or Extinction" by Fred Hoyle, the first chapter of which is devoted to labelling "concerned persons" and "environmentalists" as political animals who manipulate such movements for their own ends and discusses their Kremlin inspired activities.

There seems to exist, within the intergovernmental coordinating committee, some confusion regarding public input into the waste management program. AECL's position on public involvement is outlined in 'The Canadian Disposal Program', and I quote:

During the concept verification phase of the technical program, the various aspects of the program, and the possible risks and benefits of a nuclear waste disposal facility, will be discussed with the public and particularly with the residents of the Canadian Shield. This information program will continue throughout the other phases of the technical development of the disposal facility. Comments and concerns expressed by the public during this phase of the work will be taken into account.

During the site selection phase for the demonstration facility full information will be made available to local governments in communities near areas identified to be technically suitable for a pilot waste disposal site. The elected representatives of the community will be invited to participate in the decision on whether the facility is to be built in their area.

Once a site has been selected, further involvement of locally elected representatives will be sought on how the construction and operation of the facility could provide the maximum benefit to, and be most easily integrated with, the community.

As stated above, it is the policy of AECL to make information available to local governments in communities 'near' areas identified as suitable for a pilot waste facility which is quite acceptable for heavily populated areas like Southern Ontario but here, in Northern Ontario, it is hardly applicable. Much of Northern Ontario is unorganized townships with low population densities. By going to the nearest large community, which may be twenty miles from the actual site, and promising jobs for citizens of that community to it's council, the AECL has successfully circumvented any input from the citizens nearest the site. This maneuver also serves to increase the potential for acceptance; since council is in a community miles away and will feel safe and secure from any radiation effects and can see the possibilities of re-election enhanced by providing new employment possibilities their chances of agreement are considerably higher than from those closer to the site.

AECL also states that:

Full information will be provided and close cooperation and consultation will be maintained with the communities involved at all stages of the program.

and:

The public at all times will have an opportunity to participate through the normal processes associated with their elected representatives in the provincial legislatures and the federal parliament. Regulatory processes also provide for public involvement through submissions and hearings.

In recent testimony offered before the Select Committee on Ontario Hydro Affairs Malcolm Rowan, deputy energy minister, was quoted, in the Globe and Mail February 8th, as saying that the decision on where to drill test holes for a waste disposal site is a "political decision". Mr Rowan told the MPP's that "the government will not be bound by opposition from citizens, town officials or regional representatives.

Decision on A-waste tests is political, committee told

A decision on where to drill test holes for a nuclear waste disposal site is a "political decision" and the Government will not be bound by the feelings of local residents or their elected representatives, a Legislature committee was told yesterday.

The statement, by deputy energy minister Malcolm Rowan, answered a question that has been asked repeatedly during the past month by members of the select committee on Ontario Hydro affairs.

In his second day of testimony, Mr. Rowan told the MPPs the Government "will not be bound" by opposition from citizens, town officials or regional representatives. "There's no law one way or the other," he said. "It's a judgment based on the circumstances."

Mr. Rowan emphasized that if current rock burial research is successful the Government will attempt to find a community that wants the program and is

near suitable rock formations.

"At some point there will have to be a decision by the Government on where to put it," Mr. Rowan said. "We could go to a more remote location. That has a cost association."

Under questioning he said any dispute over a site will be settled by Canadian law or, if none applies, according to the political situation.

Previous witnesses have told the committee that no community will have a waste site thrust on it if it opposes one. But what constitutes "community approval" had not been made clear.

At one point yesterday, New Democratic Party member Elie Martel remarked angrily: "It's politics that will make this judgment and it doesn't matter a damn what local people say."

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Conflicts, unnecessary and unwanted, arise within communities because of the lack of honest, open and concerned communication between AECL and the public. A portion of the public sees no harm in allowing dump site research while another portion believes the AECL is not to be trusted; that the AECL is deliberately deceiving the public by using 'research, as a ruse to establish a dump. The latter position seems to be particularly revelent in view of the fact that AECL has not established...at least, not for public record... the criteria for a satisfactory site.

Several communities have reacted negatively to AECL's, or, to be more accurate, the Intergovernmental Coordinating Committee's requests to do research in rock formations in their areas while in others the community leaders have suggested the community receive a written guarantee from AECL and Ontario Hydro promising only research and No Dumping. As sensible as this appears to be apparantly such will not happen, at least, not according to Energy Minister Robert Welch. In testimony before the Select Committee on February 14th Mr Welch even refused to define, for the committee, what constituted 'community approval'.

No promises for towns accepting research March 14/80 *Aldo + Neil* **Welch squelches deal over A-waste**

Communities that agree to be the site of research on nuclear-waste disposal will get no guarantee that the actual disposal will be done somewhere else, Ontario Energy Minister Robert Welch said yesterday.

Mr. Welch's statement to the Legislature's select committee on Ontario Hydro affairs put a firm lid on suggestions that such a deal may be in the offing. Witnesses have told the committee that the deal is the only way to counter heated opposition in every community that has been approached as a research site.

Since the program began in 1976, researchers have been virtually run out of Madoc and Sudbury and are now facing opposition in Atikokan and White Lake.

Mr. Welch said the Government will promise only to hold public hearings before a site is chosen for disposal of highly radioactive spent reactor fuel.

"It's a stupid position for the Government to take," New Democratic Party MPP Robert Mackenzie said in an interview. "People will just say, 'If we could end up with the stuff anyway we might as well fight it from the very begin-

ning.'"

The Energy Minister's appearance before the committee marked the final day of a two-month investigation of a provincial-federal program to research waste burial in deep, hard-rock formations.

Committee members grilled the minister on the

province's statement that no decision will be made on a disposal site until "community approval" has been obtained.

Mr. Welch repeatedly turned aside questions yesterday on what will constitute community approval, evoking groans from opposition committee members.

Atikokan kept in dark by AECL, MPP states

Atikokan kept in dark by AECL, MPP states

By KIRK MAKIN
Globe and Mail Reporter

ATIKOKAN — The chairman of a Legislature select committee holding public hearings was critical yesterday of Atomic Energy of Canada Ltd. efforts to establish an Atikokan nuclear waste program.

"Wittingly or unwittingly, AECL has handled their information to the exclusion of the people who are most interested in it," committee chairman Donald MacDonald (NDP, York South) said to reporters after an often emotional public hearing here on Tuesday night.

The committee heard a four-hour litany of alleged broken promises and off-handedness displayed by AECL since a test-drilling program was conceived for Atikokan in 1978.

Most speakers among Tuesday's overflow crowd of about 250 people voiced fears that an actual disposal site would eventually be situated in the town of 5,000 and pleaded for information from neutral sources on the risks associated with such a site.

Yesterday Mr. MacDonald said acidly: "I'm pretty sure I know what I'd recommend to AECL right now, but I'll put a hold on that. The problem is not one of drilling the damn holes — it's handling the public participation.

"There's been a contention that AECL has learned a lot since Madoc but I wondered after that meeting."

Madoc, a small town north of Belleville, was chosen by AECL for testing of nuclear waste disposal techniques several years ago. An uproar from residents who felt they were being railroaded eventually led to a pullout by the Crown corporation.

Speeches and response at

Tuesday's meeting indicated that residents are as angry at what they feel is a violation of their citizen rights as they are at the disposal program itself.

The lone town councillor to oppose the program, Moe Sheppard, advised at the meeting: "Let's make it simple. We wouldn't let our children accept candy and talk to strangers in the street, and that's what we feel AECL is doing."

Mr. MacDonald said that his prior experience has been that a community has rallied behind the nuclear industry by the time the committee came on the scene. "This was the first time . . . where the consensus of the audience was clearly skeptical. God knows, Atikokan is one place where they need to

think of jobs but they weren't. They were thinking of health and safety and their rights. It was remarkable."

One speaker at the meeting, Cliff MacIntosh of the Atikokan Coalition for Nuclear Responsibility, said: "There's a difference between an information campaign and a sales campaign. It's been very difficult in a community of our size and with our resources to provide the other point of view. We've been inundated by a very smooth campaign."

Another member, Marie Nelson, told the audience that it has been tempting for AECL to "think in terms of grooming an economically desperate town like Atikokan for the honor" of a nuclear disposal site.

The experiences of the citizens of Atikokan when dealing with AECL graphically illustrates the inability, or unwillingness of the crown corporation to recognize the right of self-determination in communities in which they wish to do research. Behind-closed-door decisions; unwillingness to face informed criticism publically; the manipulation of the time and of the promotion of public meetings to mini-

mize public awareness are some of the factors which polarized the residents of Atikokan. They have called for a full inquiry before the 'concept verification'. Many people feel AECL and/or the Inter-governmental Coordinating Committee are unwilling to hold a public inquiry, to face informed citizens and establish site selection criteria. They also feel that AECL have established a development schedule which appears to have predetermined the success of the disposal concept which would indicate that what we are seeing is an orchestrated attempt to subvert what AECL calls the "normal processes" and an 'getting on with the completion of their program.

AECL representatives and other industry representatives have attempted to discredit individuals and organizations which have taken an anti-nuclear stance and those who have voiced their concerns regarding unsafe practises. Enclosed are several examples of this questionable behavior which were compiled by Dr Gordon Edwards and submitted to the Select Committee on Ontario Hydro Affairs.



requiring response

February 28, 1980.

Mr. Brad Franklin,
Information Officer,
Nuclear Waste Management,
Atomic Energy of Canada Limited,
Corporate Office,
Ottawa. K1A 0S4

Dear Mr. Franklin:

In reply to your letter of February 22nd outlining brief comments attributed to Members, you indicated that "Peters is all in favour of our PI Program in Region 10". This, of course, is incorrect as is the statement "Peters wished PI Program to be extended into Region 6".

What I said in the case of Cochrane and Nipissing was exactly the same as I said for Timiskaming -- that I had no objections to Atomic Energy of Canada providing the Public Information Program which you outlined to John Rodriguez and myself in my office on June 20th, to the people through public meetings.

Surely, you must have got from the conversation that I had personal objections to any type of nuclear waste being deposited in Timiskaming or anywhere in Northern Ontario, but that in the final analysis an informed public would indicate the same thing, I was sure.

In the meantime, I was shocked that neither Ontario Hydro nor officials of Atomic Energy of Canada were sufficiently qualified to attend a public meeting which was held in Kirkland Lake to discuss the pros and cons of underground storage of nuclear waste.

The public showed considerable interest. The anti-nuclear organizations dominated the three-day seminar and the three candidates representing their parties had to make excuses for both government agencies, who used the most flimsy excuses to cover their incompetence.

The argument was used by both Hydro and Atomic Energy that the meeting would be stacked by the anti-nuclear people, but in fact most of the people attending the three day seminar were originally uncommitted as to the subject of waste disposal.

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In light of the conflicting reports from Atikokan, and having had the opportunity of hearing both sides of the case, I would offer the officials of Atomic Energy of Canada some free advice. Before you try to sell publicly any type of waste disposal, get your facts straight and make an honest presentation to the public. The public is not as uninformed as even Members of Parliament have been. They have had the opportunity now of hearing one side of the story in great detail and the concerned young people will carry that message all across Ontario. Unless you are honest and straight forward, Atomic Energy of Canada will find itself in greater difficulty when it does finally decide to make a more balanced presentation -- being chicken sure isn't the way to do it.

Getting back to the subject at hand, I had no objection to your making a public presentation to meetings of the general public called for that purpose, the purpose being to discuss the possibility of drilling to ascertain whether or not the type of rock you were looking for was available and what you might do with it if it was. This did not mean going into town, as you did in Kirkland Lake, to discuss it with the Council with the full intention of drilling in an unorganized area where the people are not represented and where you refused to attend public meetings to specifically discuss the subject.

I hope this information is of assistance, as I am still of the opinion we must, as Canadians, find a way to dispose of our atomic garbage before it piles up to a point where it is beyond solution.

I will be following the activities of the Canada-Ontario Nuclear Fuel Waste Management Co-ordinating Committee with interest.

Sincerely yours,



Arnold Peters.

c.c. to Evelyn Gigantes, M.P.P. ✓
Ontario Select Committee on Hydro Affairs
President, Atomic Energy of Canada Limited

CASES OF MISINFORMATION AND ATTEMPTED SUPPRESSION

G. Edwards
November 5/79III. The New Brunswick Teacher Episode

When an AECL Public Relations man went to visit a school classroom in New Brunswick, he was shocked and embarrassed by the penetrating questions that the school children asked about such things as nuclear wastes and nuclear weapons. Upon his return to Ottawa, the PR man wrote a threatening letter to the teacher, urging him to desist from communicating such unpleasant information to school children, and warning the teacher that he (the AECL man) would try to have him disciplined or even removed from his post unless he mended his ways. According to the teacher, both he and his wife were so frightened they could scarcely sleep for several nights.

Document

8. Letter from Dr. Kim Krenz to "Carl", dated May 31, 1976.

VII. The Amory Lovins Broadsheet Episode

Dr. Kim Krenz, the same AECL public relations officer that was involved in the New Brunswick Teacher Episode, the Yin Yang Episode, and the Prince Edward Island Legislature Episode, was fond of mocking the views of people who advocate a reduction in energy demand through increased energy efficiency.

In 1976, even while deploring the "despicable" behaviour of a New Brunswick teacher who had the audacity to teach his pupils about nuclear weapons and nuclear waste, Dr. Krenz was distributing a highly offensive broadsheet which grossly misrepresents Amory Lovins' point of view, in an especially grotesque manner. The broadsheet, along with the associated correspondence, is enclosed.

On behalf of the Canadian Coalition for Nuclear Responsibility, I categorically deny the claim in Ross Campbell's letter that "Dr. Krenz has in fact bent over backwards in an attempt to achieve common ground with some of the members and component groups of the Canadian Coalition for Nuclear Responsibility. He is himself an environmentalist and shares many of their views". Every bit of evidence that has come to my attention indicates that Dr. Krenz has alienated, frightened, insulted, or verbally abused most of the CCNR people with whom he came in contact, and that he is antagonistic to almost all of our views in the CCNR.

Dr. Krenz left AECL to join the Solar Energy Research Group at the National Research Council of Canada.

Documents

20. Letter from Ross Campbell (AECL) to Amory Lovins, dated December 16, 1976, with Broadsheet.
21. Letter from Amory Lovins to Ross Campbell, dated December 6, 1976.

Suggested Witness:

Amory Lovins

I. The National Film Board Episode

When the N.F.B. released a controversial film entitled "No Act of God", dramatizing the major issues that have impelled the nuclear debate worldwide, the Canadian nuclear industry was quick to try to suppress the film by forcing it out of circulation. Making rash and unsubstantiated accusations of factual errors in the film, the industry even managed to get pressure exerted on the Film Board from the Ministerial Level (see attached correspondence from Alastair Gillespie to John Roberts, labelled document #1).

There was a storm of highly emotional letters (samples attached), verging on paranoia from representatives of the nuclear industry (viz. "the work of a small, international, highly organized and dedicated body of activists whose stated aim is to change the technological and economic, and thus the social structures of the Western nations", from document #2, attached). In addition, the Canadian Nuclear Association prepared a blow-by-blow critique of the film, supposedly exposing the film's factual errors. In response to a request from then Secretary of State John Roberts, the N.F.B. undertook an internal review of the C.N.A. critique. This review failed to confirm the presence of any factual errors in the film, but it did succeed in identifying numerous factual errors in the C.N.A. critique! The N.F.B. ultimately published its rebuttal of the C.N.A. critique as a small book, and informed the press of the C.N.A.'s thinly disguised attempts at political censorship.

In retrospect, it is clear that AECL, the C.N.A., and other nuclear-related organizations, over-reacted to a film whose tone they objected to. They subsequently misrepresented their own emotional distress as being due to errors of fact in the film, when in reality there were no errors of fact at all. Their attempts to suppress the film were clumsy, unjustified, and unsuccessful. Most of the industry's attempts at suppression fall into this general category, but not all.

Documents

1. Letter from Alastair Gillespie to John Roberts, undated.
2. Letter from David Armour of the Electrical and Electronic Manufacturers Association to Secretary of State John Roberts, August 29, 1978 (copies to N.F.B., Manitoba Hydro, AECL and Ontario Hydro).
3. Letter from John Davies of Ontario Hydro to André Lamy, N.F.B. Commissioner, May 8, 1978.

IV. The B.C. Medical Association Episode

AECL was very upset when the B.C. Medical Association passed a resolution saying that it was "irresponsible in the extreme for the Government of Canada to allow the further development of uranium mining and reactor construction until a safe, proven, permanent disposal technology is developed for the wastes that have already been produced". They were even more upset when the B.C.M.A. brought this same resolution to the Canadian Medical Association for their approval. AECL asked for an opportunity to brief the C.M.A. Council of Community Health on the subject of nuclear wastes. Dr. Robert Woollard of the B.C.M.A. was invited to attend the presentation at C.M.A. headquarters in Ottawa, and Dr. Woollard in turn asked me to accompany him to the briefing session.

When the day of the meeting arrived, strenuous efforts were made to have me barred from attending the meeting at all. However, Dr. Woollard patiently explained that he has asked me along and saw no harm in my attendance, and so, after much animated discussion in the hall, I was finally allowed to attend on condition that I remain absolutely silent during the meeting. The AECL presentation which ensued was strongly based on bar graphs taken from the Inhaber Report purporting to show that nuclear power was safer than solar heating for homes. This report has subsequently been thoroughly discredited as both incompetent and misleading. However, AECL has got into the habit of embracing any technical-looking report that serves their promotional purposes, and so, just as they had touted the Executive Summary of the Rasmussen Report on reactor safety (which has since been repudiated by the U.S. Nuclear Regulatory Agency), so they uncritically accepted the Inhaber Report as "evidence" that nuclear power is acceptably safe, and used it to influence others.

On a later occasion, AECL asked to meet with the B.C.M.A. to discuss nuclear wastes with them. At that time a telegram was sent to Mr. Rigby, Executive Director of the B.C.M.A., in which my character is called into question in a rather sleazy way. This is but one of many instances in which AECL representatives have attacked my veracity and my integrity before professional bodies without ever substantiating their charges. The individuals involved are usually too cowardly to put their slanderous words in print, but this time somebody slipped up.

Documents

9. Telegram from J. Boulton (AECL) to Dr. Norman Rigby, Executive Director of the B.C.M.A., dated November 7, 1978. This telegram and Dr. Rigby's reply have already been filed as an exhibit with the Committee.

CASES OF MISINFORMATION AND ATTEMPTED SUPPRESSION

G. Edwards
November 5/79.

II. The Ottawa Doctor Episode

When an Ottawa doctor became concerned about a local radiation hazard in his subdivision, involving a quantity of low-level radioactive wastes dumped on a vacant lot, covered with a plastic sheet, and weighted down with rubber tires, he began to make inquiries. The sheet was torn, and radioactive dust was blowing through streets of the subdivision in which he lived. He found that the AECB had given permission for the radioactive waste to be deposited there in the first place, and yet had failed to police it or monitor it in any adequate way.

He wrote an angry letter to Mr. Marc Lalonde, then Minister of Health and Welfare, urging that something be done about the hazard and condemning the AECB for allowing the situation to exist. Mr. Lalonde forwarded a copy of this letter to Dr. Al Prince, then President of the AECB, who wrote a very threatening letter to the Ottawa doctor, harshly denouncing the impropriety of the doctor's action, and informing the poor doctor that he (Dr. Prince) was reporting the incident to the Ontario College of Physicians and Surgeons for possible disciplinary action for the alleged unprofessional conduct on the part of the doctor!

Document

7. Correspondence:

- * Letter to Marc Lalonde from Ottawa Doctor, April 4, 1977.
- * Letter to Ottawa Doctor by Dr. A. T. Prince, April 15, 1977.
- * Letter to Ontario College of Physicians & Surgeons by Dr. A. T. Prince (AECB), April 15, 1977.

This correspondence has already been filed as an exhibit with the Committee.

From The House of Commons Debates

January 31 1978

Mr. Wenman: "In the recently introduced nuclear control bill provision is made for public hearings -- a reaction to public protestations of nuclear facilities being put up in their backyard without public debate. . . . public hearings do perform several useful functions; gathering information, increasing public participation and acceptability of decisions, and assisting decision-makers, the minister and his civil servants, to choose from different alternatives that may be put forward.

Why is the government so afraid of information? Why is it so afraid of facts? If that is all this legislation does, it could produce information to improve a decision and to make sure a decision is morally right.

Legislation of the sort I have proposed requires comprehensive freedom of information laws. Without access to government research documents, the public's hands are tied. An excellent example is the attempt, which I brought up recently in the national resources standing committee, of citizens trying to prepare good briefs respecting the nuclear waste issue without access to many government documents which are now classified confidential. These 30 environmental groups from across Canada were notified only two weeks ahead that they could appear and present a brief before the committee. They are told that they cannot have the information that is available to the committee, the same scientific government information -- "make your brief but get your own material." Why, if this is public information, is it not available to all the people making objections? It seems almost ridiculous to believe that government in this day and age would withhold such information.

-Robert Wenman, M.P.
(Fraser Valley West)

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CANADA CONFERENCE ON NUCLEAR WASTE
AGENDA

Thursday, January 31, 1980

- 1:00 pm. - Opening of conference by Dean L.R. Jones of Northern College. Auditorium.
- 1:15 pm. - Dr. Gordon Edwards, Canadian Coalition for Nuclear Responsibility. "An Overview of the Canadian Nuclear Industry." Auditorium.
- 2:30 pm. - Dr. Marvin Resnikoff, Prof. of Physics, State University of New York at Buffalo. "Reprocessing, Transportation of Nuclear Waste". Auditorium.
- 3:30 pm. - Dr. Helen Caldicott (video-tape). Nuclear Energy - A Medical and Moral Issue. Auditorium.
Delegates Meeting - Lecture Hall Rm. A-106.
- 5:30 pm. - Dinner
- 7:00 pm. - Paul McKay of Birchbark Alliance. Auditorium.
Slide show "Who asked us?"
- 8:30 pm. - Gordon Edwards and Paul McKay will answer questions from the public. Auditorium.

Friday, February 1, 1980

- 9:00 am. - Dr. Gordon Albright, York University, Toronto. Auditorium.
- 10:00 am. - Norm Rubin, Energy Probe. "Economics of Nuclear Power". Auditorium.
- 11:30 am. - Lunch
- 1:00 pm. - Commissioner Emilio Varanini, California Energy Resources, Conservation and Development Commission. "Nuclear Waste Disposal". Auditorium.
- 2:00 pm. - Dr. Thomas Winters, Physicians for Social Responsibility, Boston, Massachusetts. Auditorium.
- 3:00 pm. - More Nuclear Power Plants. Auditorium. Film.
Workshops for Delegates -
1. Alternatives
2. Mobilizing the Public
3. Radiation and Man
- 5:30 pm. - Dinner
- 7:00 pm. - Dr. John Gale, Earth Sciences Dept., University of Waterloo
"Hydro Geology and Geologic Waste Disposal".

CANADA CONFERENCE ON NUCLEAR WASTE
AGENDA

Saturday, February 2, 1980

- 9:00 am. - Dr. Frank Sommers, Faculty of Medicine, University of Toronto, psychiatrist. Psychological Impact of Life in the Nuclear Age.
- 10:00 am. - AECL public relations film. "Management of Radioactive waste".
- 10:45 am. - Dr. Gordon Edwards, Canadian Coalition for Nuclear Responsibility. Auditorium. "Canadian Waste Disposal Program".
- 11:30 am. - Lunch
- 1:00 pm. - Mark Cherniack, New England Appropriate Technology Group. "Developing Local Energy Policies". Auditorium.
- 2:00 pm. - Lawrence Solomon, author of "The Conserver Solution". Auditorium.
- 3:00 pm. - 3 Candidates Debate. Auditorium.
- 4:00 pm. - Plenary. Auditorium.
- 6:00 pm. - Dinner
- 8:00 pm. - Saturday Night Dance music by the Hartney Mountain Band. Masonic Temple.

GENERAL INFORMATION

Transportation, billeting and food will be provided for invited delegates.

Motel rooms will be reserved for non-delegates requesting such. Non-delegates will also provide their own transportation. For a \$5.00 fee, non-delegates will receive one dinner (Thurs), one lunch (Fri) and one lunch (Sat). Please confirm by Jan. 18/80.

Day care will be provided for children who are toilet trained.

For reservations, write or call:

ESTHER PUMMELL,
TARZWELL, Ontario T0K 1V0
1 (705) 642-3603

For information call:

TERRY GRAVES,
1 (705) 544-7761

RESERVATIONS:

Please reserve in the name below,

☐ one single room, or

☐ one double room,

for Thurs. ☐, Fri. ☐, Sat. ☐, at the

Don Lou Motel ☐, or the

Commodore Motel ☐.

\$5.00 meal ticket ☐

Name: _____

Address: _____

Phone No. _____

ROOM RATES:

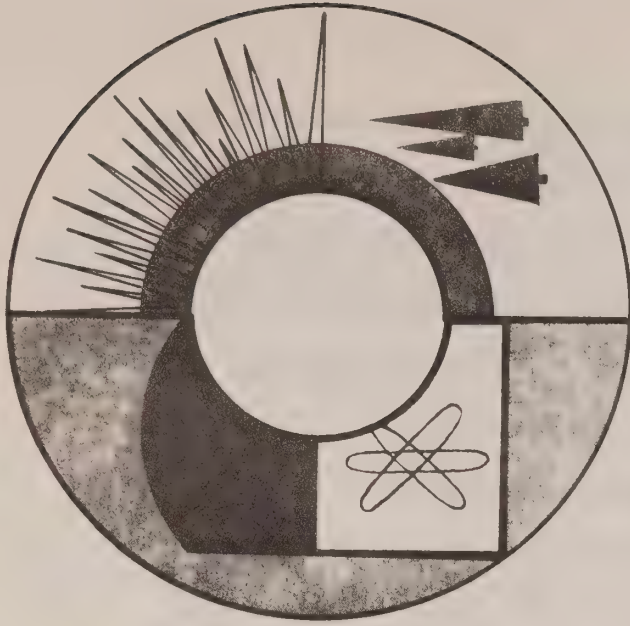
Don Lou - \$21.00 per night single

\$21.00 per night double

Commodore \$25.00 per night single

\$25.00 per night double

RESERVATIONS MUST BE CONFIRMED BEFORE
JANUARY 18th.



THE
CANADA
CONFERENCE ON
NUCLEAR WASTE

Jan. 31st, Feb. 1st & 2nd, 1980
NORTHERN COLLEGE OF
APPLIED ARTS & TECHNOLOGY
KIRKLAND LAKE, ONTARIO

PRESENTED BY
CANWIN

Citizens Against Nuclear Waste In The North

CANWIN
R.R. 1
CHARLTON, ONTARIO P0J 1B0



THE CANADA CONFERENCE ON NUCLEAR WASTE WAS NOT, IN SOME RESPECTS, THE SUCCESS FOR WHICH I STRIVED. DESPITE THE FACT THAT IT ATTRACTED AN AUDIENCE OF OVER 1400 PEOPLE AND BROAD MEDIA COVERAGE, WITHOUT THE PARTICIPATION OF ATOMIC ENERGY OF CANADA LTD AND ONTARIO HYDRO THE CONFERENCE LACKED CREDENCE AND WAS THUS BOYCOTTED BY SOME PEOPLE.

THE CONFERENCE WAS HOWEVER A GREAT SUCCESS IN THAT IT AFFORDED CITIZENS FROM MANY COMMUNITIES IN NORTHERN ONTARIO THE OPPORTUNITY TO SIT DOWN TOGETHER TO DISCUSS CONCERNS ABOUT THE POSSIBILITY OF A NUCLEAR DISPOSAL FACILITY BEING ESTABLISHED IN OUR COMMUNITIES. FROM THESE DISCUSSIONS WAS FORMED THE NORTHERN ONTARIO COALITION FOR NUCLEAR RESPONSIBILITY.

FOR MAKING THIS ENDEAVOUR POSSIBLE I AM SINCERELY GRATEFUL TO:

THE ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT

ENVIRONMENT CANADA

THE UNITED CHURCH OF CANADA

THE NUMEROUS CITIZENS AND CITIZENS GROUPS

FOR DONATING TIME EFFORT AND FUNDS TO MAKE

THE CANADA CONFERENCE ON NUCLEAR WASTE

A REALITY.

Tony Daniels

MARK CHERNIACK

Mark Cherniac spoke about a study conducted in Franklin County Massachusetts. It was carried out by the New England Appropriate Technology Group of which he is a member.

The group charted the outflow of money from the county due to energy use. They then suggested ways that the money could be kept in the county by the development of energy sources that had a local and renewable base such as wood and solar, and by energy conservation.

Cherniack described the conclusions of the study as well as detailing what is presently happening in the county as a result of the study.

LAWRENCE SOLOMON

Lawrence Solomon spoke on the role of individuals in shaping the energy future of the country. He discussed conservation by individuals as well as by industry. He spoke about new developments in housing that are simple in themselves but are capable of saving vast amounts of energy. He spoke of the need for creativity in solving our energy problems and pointed out that there should be different solutions for each region of the country using the climate and physical features of a locality to the best advantage.

LAWRENCE McDERMOTT

Spoke in 'organizing the community' workshop. Mr. McDermott is a councillor in Lanark County (which is an area designated for waste management research), he explained the situation in Lanark.

DR. GORDON ALBRIGHT

Dr. Albright discussed some of the philosophical aspects of nuclear power and the nuclear industry. He gave historical background on the role that various technologies have played in shaping the societies that used them. He then spoke specifically on the ways that dependence on nuclear power could affect our civilization mentally, physically, and politically.

NORMAN RUBIN

Norman Rubin spoke on the economic aspects of nuclear power. He first concentrated on putting electric power into perspective with the other sources of energy that are used in Canada and then showed the percent of that electrical power which is produced by nuclear reactors.

With this background Rubin then went on to show that a disproportionate amount of the money spent on energy was spent on electricity and that the amount of research money spent on nuclear power was high in relation to how much of our energy needs were met by this source.

He outlined the need for spending more money on energy conservation and for more research to be done on renewable energy sources. He also compared the amount of employment created by renewable energy sources with the number of jobs that the nuclear industry produces.

EMILIO VARANINI

Commissioner Varanini addressed the specific problems associated with geologic disposal of nuclear waste. What he presented in brief, was the findings of the California Energy Resources Conservation and Development Commission of which he is the presiding member.

He detailed the history of waste disposal research in the United States. He described the projected time frame in which that country hopes to start up a commercial scale repository. He discussed stability of rock and the unsolved questions pertaining to how the rock might react with the hot radioactive wastes and how to plug the repository once it is full.

He detailed the need to establish strict criteria for what is a suitable formation for such a repository and described the amount of time and the type of research necessary to name this criteria.

He explained why his commission feels that the problem of waste disposal is so serious and why the commission will not license any more reactors in their state until the problem is resolved.

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DR. THOMAS WINTERS

Dr. Winters, a physician, spoke about the medical aspects of radiation. He gave examples of cases where harm was done to people by levels of radiation within the acceptable levels set by the atomic regulatory agencies. He discussed the need for lowering these levels. He also addressed the problem of identifying all of the cases where radiation has caused disease and pointed out the need for in depth studies in this area.

Dr. Winters discussed the disposal of low level radioactive wastes and the importance of their safe containment.

He talked about the health problems associated with a reprocessing plant.

DR. JOHN GALE

Dr. Gale spoke on the geologic aspects of deep rock disposal of nuclear waste. He dealt in great detail with stresses within the rock and flow systems through the rock.

He showed that over the thousands of years that the waste must be kept isolated, that the host, that is the rock, must be considered to be the primary barrier separating the waste from the rest of the environment.

He discussed the experiments that he and a group of other geologists conducted in Sweden to study the flow of water through crystalline rock. He explained how various tests are performed and gave examples of the type of information that these tests might provide and the various ways that this information could be presented and interpreted.

He described ways that the rock might react in response to drilling and heat. He spoke about the problems of sealing the shaft when the operation is done.

He then described the type and amount of research necessary to be adequately assured of a safe and permanent disposal method.

DR. FRANK SOMMERS

Dr. Sommers took as his subject the psychological impact of the nuclear age. He spoke of the hopelessness that grasps many people when they are faced with the enormity of such problems as the arms race and the energy crisis. He stressed the importance of people not retreating into themselves in despair, but rather doing positive things in order to help alleviate the problems as well as making themselves feel better.

He then presented a plan consisting of positive action that people could take in order to better cope with these problems. His points ranged from forming support groups to keeping in good health.

DR. GORDON EDWARDS

Dr. Edwards gave an overview of the entire nuclear industry. He discussed the mining of uranium and the basic workings of a nuclear reactor as well as the waste products produced by these activities and the problems of disposing of these wastes.

He discussed in detail the environmental problems caused by the exposed uranium tailings in Elliot Lake and the physical and financial aspects of safely disposing of them.

Dr. Edwards gave a detailed analysis of the various byproducts of the nuclear reaction: what specific dangers they present, how long they are toxic.

He spoke in length of the programs carried out in the United States in search of a solution to the problem of nuclear waste disposal.

DR. MARVIN RESNIKOFF

Dr. Resnikoff spoke on the problems of waste disposal and waste reprocessing. He presented slides to go along with his lecture.

He began by outlining the history and operations of the West Valley reprocessing plant in New York State. He discussed the exposure of workers to radioactivity as well as exposure that the public in neighboring communities received. Effects on wildlife and the river that runs through the site were also described. He detailed the short term effects that the plant had on both the local community and the state as a whole and discussed why the plant had to shut down. He outlined the still unsolved problem of decontaminating the plant and the surrounding area.

He then focused on the U.S. waste disposal plan as a whole. He discussed the various attempts to find a suitable site in the United States and the reasons why none so far had been found to be acceptable. He described why burying the wastes in deep salt mines was unfeasible. He detailed the problem of water migration through hard rock.

PAUL MCKAY

Paul McKay presented a slide show that discussed the nuclear industry following it from the mining stage through the production of electricity and on into the problems associated with the disposal of radioactive wastes.

He went into the economics of nuclear power and discussed those costs that aren't taken into account when the price of nuclear generated electricity is promoted as being a cheap source of energy.

He continued with a discussion of conservation and described energy saving steps that are available to today's technology. He also compared the energy saved by money invested in energy conservation to the energy produced by a like sum invested in a nuclear power plant.

NORMAN RUBIN

Norman Rubin is a Nuclear Power Researcher for Energy Probe of Toronto. He has published articles on CANDU Reactor Exports, Diagnostic X-Rays, and CANDU Reactor Licensing Standards, as well as a brief to the Atomic Energy Control Board titled "The Perils of Probabilities".

He has spoken extensively to church groups, libraries, university and school groups, energy symposia, government committees, etc. He makes frequent appearances on both national and local (Toronto) radio and television programmes. He has been seen on CBC Newsmagazine, Canada AM, Street Talk, Point Blank, and the Shulman File as well as many other popular news programmes.

Rubin graduated from Massachusetts Institute of Technology with a Bachelor of Science degree in 1966, earned his Master of Arts in Musicology from Boston University in 1969, and a Master of Fine Arts in Music History from Princeton University in 1970. He was a Lecturer at the University of Toronto before taking up his position with Energy Probe.

LAWRENCE SOLOMON

Lawrence Solomon is the author of The Conserver Solution and teaches courses in writing and the conserver society through the Skills Exchange of Toronto. He has had over one hundred speaking engagements in the last two years including three speaking tours for the Association of Canadian Clubs, a speaking engagement at Canada's two armed forces bases in West Germany, and speaking engagements at the University of Helsinki and the Engineering Academy at Copenhagen.

As an advocate for the conserver society he is continually meeting with senior civil servants and elected representatives, including ministers of the crown, chairmen of our crown corporations, and leaders of the opposition parties.

In the past two years he has made approximately two hundred appearances on radio and television including such public affairs shows as Fifth Estate and Canada AM.

He is a member of Amnesty International, Canadian Civil Liberties Association, Canadian Environmental Law Association, Couchiching Conference on Public Affairs, Energy Probe, and Pollution Probe.

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GORDON D.J. EDWARDS

Gordon Edwards is the Chairman of the Canadian Coalition for Nuclear Responsibility. He is a Professor in the Integrated Science Program at Vanier College. One of the courses that he teaches there is Energy and Society. Before assuming his post at Vanier he was a Lecturer on Mathematics and English Literature at the University of Western Ontario.

Dr. Edwards has earned degrees from the University of Toronto; B.Sc. in Math and Physics, the University of Chicago; M.S. in Mathematics, M.A. in English Literature, and Queen's University; Ph.D. in Mathematics.

He has written numerous papers covering a wide range of nuclear issues. These include "Nuclear Safety on a Canadian Setting: What's the Fuss All About?" presented to the Select Committee on Ontario Hydro Affairs, and "Time to Stop and Think", a brief presented to Prime Minister Trudeau.

Papers that he has co-written with other members of the CCNR include "Nuclear Wastes: What, We Worry?" presented to the House of Commons Standing Committee on National Resources and Public Works, "On Energy", presented to the Quebec Legislative's Energy Committee, and "Non-Nuclear Futures for Ontario".

Dr. Edwards' television and radio appearances include such shows as "The Great Debate", hosted by Pierre Berton, "A Power Trip", dealing with renewable energy and aired on CBC Radios "Ideas" series, and "The Watson Report".

In response to invitations he has spoken to many national and international gatherings. Among these were a seminar on nuclear issues at the Whiteshell Nuclear Research Establishment, "Nuclear Issues", a seminar sponsored by the Royal Commission on Electric Power Planning, "Energy Days" televised from the chambers of the Prince Edward Island Legislature, and "Habitat Forum" at the U.N. Conference on Human Settlements in Vancouver in 1976. He was the Key-note Speaker at the "Energy and People" Conference at Dalhousie University.

As an expert on nuclear energy he has served as a consultant to numerous groups including the National Film Board of Canada, the Science Council of Canada, the Royal Commission on Electric Power Planning (Ontario), United Steelworkers of America, the New Brunswick Legislature's Energy Committee, the Prince Edward Island Legislature and the Dept. of Consumer and Corporate Affairs in Ottawa.

In addition to his work for nuclear responsibility Dr. Edwards lectures and writes on the subject of Mathematics.

He is married and the father of three sons.

Marvin Resnikoff is co-project director and staff scientist of the Sierra Club Radioactive Waste Campaign. He is also a lecturer at Rachel Carson College, State University of New York at Buffalo, where he teaches a course titled, "Energy for the Future" and does research on the costs/benefits of nuclear fuel reprocessing under a grant from the Environmental Protection Agency. He has been associated with the College since 1974. Rachel Carson College is an undergraduate environmental studies division of SUNY at Buffalo. As staff scientist for the Radioactive Waste Campaign, Dr. Resnikoff researched the hazards of spent fuel transport, medical wastes, geologic repositories and nuclear fuel reprocessing, and wrote articles for The Waste Paper and fact sheets and White Papers. As co-project director, he helped develop and coordinate Campaign policies and worked with staff to implement these policies.

Dr. Resnikoff is an international expert in the field of nuclear fuel reprocessing and waste management. He has testified over 20 times before State legislatures and the United States Congress. His paper on reprocessing economics was the first to show that the economics of recycling were marginal; his paper on decommissioning of nuclear reactors was the first to show that reactors would remain radioactive for hundreds of thousands of years. He has served as a consultant to the New York State Attorney General on the subject of air shipments of plutonium through New York's Kennedy Airport and to the Illinois Attorney General on the expansion of the GE spent fuel pool at Morris, Illinois, and the Commonwealth Edison spent fuel pool at Zion, Illinois. He was an invited speaker at the 1976 Canadian meeting of the American Nuclear Society to discuss the risk of transporting plutonium by air.

During the year 1973, Dr. Resnikoff was a Fulbright lecturer in the area of group theory and particle physics at the Universidad de Chile in Santiago, Chile. Previous to that, he was an Assistant Professor of Physics at the State University of New York at Buffalo. He has numerous papers in the area of particle physics, performed under grants from the National Science Foundation. He is a 1963 graduate of the University of Michigan with a Doctor of Philosophy in Theoretical Physics, specializing in group theory and particle physics.

Dr. Resnikoff has provided expert testimony in rate cases and power facility siting cases before the New York Public Service Commission and the New York State Board on Electric Generation Siting and the Environment. As a Staff Scientist for the New York Public Interest Research Group, he worked on electric energy and rate structure issues from 1975 through 1977. As present Chair of the Nuclear Subcommittee of the Energy Policy Committee of the national Sierra Club, he has advocated conservation and the use of alternate energy sources. On behalf of the Club, he has provided comments on environmental impact statements on mixed oxide fuels, the liquid metal fast breeder reactor, nuclear waste disposal, the uranium fuel cycle, and the Interagency Review Group Report on Nuclear Waste Management. He has also served as technical coordinator of the Club's intervention in the NRC construction permit and licensing proceedings concerning Nuclear Fuel Services, a nuclear fuel reprocessing plant located 35 miles south of Buffalo, and the NRC's plutonium recycle (GESMO) and uranium fuel cycle proceedings, for which he also supplied testimony. Dr. Resnikoff is a member of the Energy Study Panel of the National Council of Churches, the Energy Policy and Environment Committee (an advisory committee to the Commissioner of the New York State Department of Environmental Conservation), the Department of Energy Task Group on Decontamination and Decommissioning of the West Valley Tanks, the Gorleben International Review (a team of international experts hired by the State of Lower Saxony, West Germany, to review the proposed reprocessing and waste disposal plans of the nuclear industry) and the NRC Task Group on the Transportation of Radionuclides through Urban Environments. He also serves as a consultant to the New England Coalition on Nuclear Pollution, Ecology Action of Oswego, West Valley Coalition, Environmentalists, Inc., and now, through the Sierra Club Radioactive Waste Campaign, numerous citizen groups throughout New York State and the country.

Probe

January 1980.

Marilyn Aarons has been on staff for 3 1/2 years with Energy Probe, a project of the Pollution Probe Foundation.

During that time she participated in the preparation of submissions to:

- .The Royal Commission on Electric Power Planning,
- .The Select Committee on Ontario Hydro Affairs,
- .The Standing Committee on National Resources and Public Works.

She has, and continues to, help anti-nuclear groups throughout Ontario get organized.

During this past spring, Marilyn, along with the Canadian Coalition for Nuclear Responsibility, organised a series of workshops in anticipation of the National Inquiry into Nuclear Energy. The workshops were followed up this fall with meetings with the Ministry of Energy, Mines and Resources and the Ministry of the Environment.

She has spoken to groups such as the University Womens' Clubs, the Ontario Liberal's Policy Conference and the National Action Committee on the Status of Women.

Marilyn sat on the National Steering Committee planning Canada's participation in International Energy Conservation Month.

Marilyn presently sits on the steering committee which sponsors the Canadian Energy Exposition. The Exposition has been held at Harbourfront for the last two years, this year is will be held at the Ontario Science Centre.

Marilyn helped launch and is a contributor to the Probe Post.

CANADA CONFERENCE ON NUCLEAR WASTE
RESOLUTIONS OF THE NORTHERN ONTARIO
COALITION FOR NUCLEAR RESPONSIBILITY

Whereas we are not convinced that the nuclear fuel cycle provides the answer to Canada's energy needs especially in view of the technical problems associated with nuclear waste disposal, lack of stringent safety standards, risk to public health, high capital investment, low employment per dollar invested, we ask:

1. That the federal government not accept the Science Council of Canada's recommendation to allocate \$2.2 billion for advanced nuclear fuel cycle research;
2. That until a safe permanent disposal method for uranium mine tailings, refinery wastes and high-level reactor waste is demonstrated, no further licensing of any nuclear facilities (except medical facilities) be allowed in Canada.

Whereas Atomic Energy of Canada Limited and Ontario Hydro are the manufacturer, promoter and vendor of nuclear energy and therefore have a vested interest in the social acceptance of nuclear energy, its waste products, health hazards and high capital costs we ask:

3. That in the future, Ontario Hydro and AECL should not be allowed to proceed with a public information program on any aspect of the nuclear fuel cycle, without a balanced and equally financed representation from responsible public interest groups;
4. This assembly, having extended invitations to participate in the Canada Conference on Nuclear Waste to AECL and Ontario Hydro:
 - a. Notes, with regret, their non-participation in a dialogue with the people of the north who attended the conference;
 - b. Deplores their manner of communicating ~~the~~ with the organizers of the conference, including their failure to even acknowledge, in the case of Ontario Hydro, any of the invitations issued or, in the case of AECL, to acknowledge the final invitation issued;
 - c. Censures the senior executive officers of these two public, taxpayer-owned companies for not dealing directly with and having proper regard for the legitimate concerns of the people of the north about those issues that ultimately affect their lives;
 - d. And furthermore, this assembly expects that in all future public forums, all corporations and institutions dealing with the issue of nuclear energy,
 - i. provide ready public access to all information in their possession related to the issue and
 - ii. finance the engagement of consultants by the public, to critique and provide peer review of the proposed project.
5. That AECL should not be allowed to go into small communities (or anywhere) to present nuclear issues unless equal funding and time are made available to critics.

NORTHERN ONTARIO COALITION FOR NUCLEAR RESPONSIBILITY

PRESS RELEASE

KIRKLAND LAKE, ONTARIO - FEB. 8, 1980

The Canada Conference on Nuclear Waste ended yesterday afternoon in Kirkland Lake with the formation of a new coalition. To be called the Northern Ontario Coalition for Nuclear Responsibility (NOCNR), it will be composed of environmental groups, church groups, educational institutions and native groups. The purpose of this new group is to pool information and resources among groups across northern Ontario and to insure that adequate critical perspectives on the current nuclear waste disposal program be presented to the citizens of northern Ontario.

The first official action of NOCNR was to send a telegram to Prime Minister Clark and Premier Davis insisting that the paternalistic, one-sided public relations programs conducted by AECL and Ontario Hydro in northern Ontario communities be balanced by equally funded educational programs conducted by the NOCNR or by some equally representative and competent group (see attached telegram).

Attachments: Telegram from NOCNR
Resolutions from Conference

For further information contact Terry Graves (705) 544-7761

Marilyn Aarons (416) 978-7014

CANADA CONFERENCE ON NUCLEAR WASTE

The Canada Conference on Nuclear Waste proved beyond question that grave and unprecedented problems in the entire nuclear fuel cycle and especially radioactive waste management, remain unsolved. In a clear and comprehensive manner, Canadian and international analysts of the nuclear industry presented new compelling evidence on the environmental, economic and social hazards of the nuclear option.

Dr. John Gale of the Earth Science Dept. of Waterloo University, and presently under research contract to AECL, provided clear evidence that the scientific study of hydrogeology and contaminant movement in geological formations is only in its infancy.

- that the study of rock-fracturing and long-term geological stability has not received adequate attention.
- that, contrary to AECL's recorded opinion, drilling shafts will definitely flood at some point, and seriously compromise the integrity of the disposal methods.
- that AECL's projected time-line for waste management demonstration cannot be met.

Dr. Emilio Varanini, chairman of the California Energy Commission investigation into the feasibility of nuclear waste management, concluded that:

- the international scientific community has not developed a proven, safe, permanent disposal method for radioactive waste and that the possibility exists that one may never be found.
- as a result, the State of California has declared a legal moratorium on all reactor construction until such a method has been demonstrated.

Dr. Gordon Edwards, chairman of the CCNR, underlined the critical importance of resolving the problem of safely disposing of 80 million tons of radioactive uranium tailings presently contaminating the Ontario environment.

- AECL's clandestine plans to extract plutonium from high-level spent fuel, (as evidenced by continued AECL reference to glassification) which will result in large volumes of extremely hazardous and intractable liquid wastes.

Dr. Marvin Resnikoff, Professor of Physics at the University of New York in Buffalo, detailed the following:

- that the international record of plutonium reprocessing facilities has been a chronic history of financial, environmental and occupational health disasters;
- that the abandoned West Valley reprocessing centre in New York State has, seriously contaminated the local environment, and left the state with 600,000 gallons of high-level liquid waste, and an estimated \$1 billion clean-up bill.

Dr. Thomas Winters, of the Physicians for Social Responsibility in Boston, told the delegates that:

- health studies conducted over the past two decades have indicated that there is no safe level of radiation, and that the health effects from long-term exposure to low-levels of radiation have been seriously underestimated;
- that eminent radiation experts in the U.S. have recommended a 10-fold reduction in permissible radiation exposure levels for the public.

TAKING SIDES

Globe & Mail, Tues. Feb. 5, 1980

Boycott of nuclear debate irks group

By KIRK MAKIN

A coalition of anti-nuclear groups was shocked when Canada's two largest nuclear agencies boycotted a conference last weekend because they thought it was too one-sided.

"It certainly was one-sided — because they didn't come," a conference organizer said of the absence of Atomic Energy of Canada Ltd. and Ontario Hydro.

A telegram the coalition sent Premier William Davis yesterday termed the boycott "a major water-aid in the nuclear debate in Northern Ontario... an abdication of responsibility."

However, Cecil Morris, a Hydro spokesman, said the Kirkland Lake conference "was supposed to be a balanced hearing into the pros and cons. We felt it wasn't going to be balanced."

The three-day conference cost about \$6,000 to put on and featured a Boston doctor, a Buffalo physics professor, the commissioner of a California energy development agency and several prominent Canadian anti-nuclear spokesmen.

Michael Martin, AECL's media co-ordinator, said that first the conference organizers would let AECL representatives attend only if they paid \$2,500, but eventually they asked them to come under any terms they requested.

"There was no way we were going to make that conference credible after the shoddy way we were treated in the first place," Mr. Martin said.

Asked whether AECL has ever invited anti-nuclear speakers to its own public meetings or conferences, Mr. Martin said: "We've never objected to going and taking part in a meeting where there have been discussions with those who oppose us."

Mrs. Miyata, co-chairman of one of the groups at the conference, said that as Crown corporations, AECL and Hydro "had an obligation to be open to all views. The organizers made it

willing to be involved in a two-sided meeting."

She said the \$2,500 fee for their attendance, which was later dropped, was a "drop in the bucket when compared to AECL's public relations budget."

Mr. Martin estimated AECL spent about \$1-million on public relations last year.

He said almost two months of correspondence between AECL and the conference organizers resulted in several revisions to the agenda, giving it and Hydro more speaking time.

He said the alterations did not go far enough because neutral spokesmen from relevant Government ministries were not scheduled to speak.

When AECL called a press conference to announce their refusal to attend, they were harassed by a sit-in by the conference organizers, Mr. Martin said.

He said the organizers' next move was "to say they'd throw aside the whole agenda and give us all the time we wanted if we'd come."

Mr. Martin said he wouldn't accept that. "They couldn't allow AECL to dominate that conference. I'd never do that if I were them — allow another organization to dictate the way it would be held."

Mrs. Miyata said despite the agencies' "unreasonable demands" the coalition was willing to bend over backwards to have the agencies represented at the conference so they could answer questions from other experts.

She said this was the first time the principals of the waste management program would have been questioned by experts, something northerners have sought for a long time. She said the correspondence must have been "a stalling tactic" to avoid what might be the only conference of its size the coalition is a state organization.

The conference pressed a resolution asking the government to fund a study by AECL and Atomic Energy of Canada Ltd. on the impact of nuclear power on the environment.

AECL's boycott of nuclear talks irks organizers

Globe & Mail, Tues. Feb. 5, 1980

By KIRK MAKIN

Canada's two largest nuclear agencies boycotted a conference last weekend because they thought it was too one-sided.

"It certainly was one-sided — because they didn't come," a conference organizer said of the absence of Atomic Energy of Canada Ltd. and Ontario Hydro.

The Kirkland Lake conference was sponsored by a coalition of anti-nuclear organizations.

A telegram the coalition sent Premier William Davis yesterday termed the boycott a "water-aid in the nuclear debate in Northern Ontario... and an abdication of responsibility."

However, Cecil Morris, a Hydro spokesman, said the conference "was supposed to be an independent hearing into the pros and cons. We just felt it wasn't going to be balanced."

The three-day conference cost about \$6,000 to put on and featured U.S. experts and several prominent Canadian anti-nuclear spokesmen.

Michael Martin, AECL's media co-ordinator, said that first the conference organizers would let AECL representatives attend only if they paid \$2,500, but eventually they asked them to come under any terms they requested.

ference credible after the shoddy way we were treated in the first place," Mr. Martin said.

Bettina Miyata, co-chairman of one of the groups organizing the conference, said that as Crown corporations, AECL and Hydro "had an obligation to the taxpayer to be there. The organizers made every effort to have them participate. They simply weren't willing to be involved in a two-sided meeting."

Mr. Martin said almost two months of correspondence between AECL and conference organizers resulted in revisions to the agenda, but the alterations did not go far enough because spokesmen from relevant ministries were not asked to speak.

Mrs. Miyata said the coalition was willing to bend over backwards to have the agencies represented at the conference.

She said this would have been the first time the principals of the waste management program were questioned by experts, something northerners have sought for a long time.

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"WHO IS PETER CHIDLAND
AND WHY IS HE SAYING
ALL THOSE NASTY THINGS
ABOUT ME?"

T. GRAVES

THE CANADA CONFERENCE ON NUCLEAR WASTE WAS EMBROILED
IN CONTROVERSY FROM ITS INCEPTION. PERHAPS IT WAS THE SUB-
JECT MATTER. PERHAPS IT WAS THE PERSONALITIES INVOLVED.
PERHAPS IT WAS THE "US AGAINST THEM" ATTITUDE WHICH WAS PRO-
MOTED BY SOME.

THIS CONTROVERSY LED TO MANY CHARGES AND ALLEGATIONS
BEING LEVELLED. IN THE PROCESS MANY FACTS WERE DISTORTED.

FOR EXAMPLE THE TEMISKAMING SPEAKER (JAN. 30) CARRIED
AN ARTICLE ABOUT A CANWIN PRESS RELEASE INCORRECTLY STATING
THAT ENVIRONMENT MINISTER JOHN FRASER WOULD BE ATTENDING
THE CONFERENCE. THE ARTICLE GOES ON TO STATE MY POSITION OVER
THE ERROR. IT DOES NOT HOWEVER IDENTIFY THAT THE ERROR IS
NOT SO MUCH THAT MR. FRASER WOULD OR WOULD NOT BE ATTENDING
THE CONFERENCE BUT THAT THE PRESS RELEASE WAS CIRCULATED BE-
FORE I HAD CONFIRMATION. MR. EGON FRECH IN A TELEPHONE CON-
VERSATION , ACCUSED ME OF MAKING A FALSE STATEMENT REGARDING
MR. FRASER'S ATTENDANCE AND ACCORDING TO THE NEWSPAPER ARTICLE
THE COMMISSION WAS "IRRITATED". I HAD AT THAT TIME RECEIVED
NO RESPONSE FROM THE MINISTER'S OFFICE. THAT IS WHY THE
PRESS RELEASE WAS NOT TO BE DISTRIBUTED AT THAT TIME. ON

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THE EVENING BEFORE THE CONFERENCE, I RECEIVED A TELEPHONE CALL FROM WALTER GIFFORD OF MR FRASER'S OFFICE ASKING ME IF MR FRASER WOULD BE ATTENDING. I ALSO RECEIVED AN APOLOGY FROM HIS OFFICE REGARDING THE CONFUSION.

IN THE SAME ARTICLE MR FRECH CHARGED CANWIN WITH BEING IRRESPONSIBLE IN TRYING TO STOP RESEARCH ACTIVITIES IN THE NORTH. CANWIN, TEAC, TERRY GRAVES, THE NORTHERN ONTARIO COALITION FOR NUCLEAR RESPONSIBILITY NOR ANYONE I'M AWARE OF HAS EVER TRIED TO PREVENT RESEARCH ACTIVITIES. WE HAVE MERELY REQUESTED WRITTEN GUARANTEES THAT IT IS ONLY RESEARCH WHICH IS BEING DONE AND NOT THE ESTABLISHMENT OF A DISPOSAL FACILITY UNDER THE GUISE OF RESEARCH.

THE SPEAKER ARTICLE STATES "THE CONFERENCE WAS FORMED OUT OF POLITICAL MOTIVATION" THIS IS TOTALLY WITHOUT SUBSTANTIATION.

PETER CRIDLAND OF THE ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT IS QUOTED IN SEVERAL NEWS ARTICLES DISCUSSING CONFERENCE FUNDING AND CANWIN. I ADMIT MY OVERSIGHT REGARDING CANWIN. I APOLOGIZED AND WITHDREW THE NAME FROM USE.

HOWEVER IN A NORTHERN DAILY NEWS (FEB. 7) ITEM MR CRIDLAND MAKES REMARKS WHICH I TAKE EXCEPTION TO. I QUOTE "HE (MR. CRIDLAND) SAID IT WAS ASSUMED THAT A BALANCED TALK WOULD BE PRESENTED ON THE SUBJECT OF NUCLEAR WASTE."

"IT TURNED OUT TO BE THE BALANCE AECL AND ONTARIO HYDRO EXPECTED IT WOULD BE." OR PERHAPS THE BALANCE AECL AND ONT. HYDRO MANIPULATED IT INTO BEING.

MR CRIDLAND CONTINUES. THE CONFERENCE WAS AN "ANTI-NUCLEAR MOVEMENT IN THE AREA." NO, NOT PART OF AN ANTI-NUCLEAR MOVEMENT BUT A PRO NUCLEAR RESPONSIBILITY MOVE-

Conference Funders Unaware Of CANWIN

By P.J. WILSON
(Tri-Town Bureau)

NEW LISKEARD (Staff) — The Royal Commission for the Northern Environment, which funded the lion's share of the Canada Conference on Nuclear Waste in Kirkland Lake last week, was unaware of the existence of CANWIN when the grant was made.

Peter Cridland, speaking for the commission, said Wednesday the grant was made to Terry Graves, and not to any organization, especially a "citizens against anything."

"The grant was to provide expert advice and an opportunity for people to participate in the conference," he said.

He said the original conference was to last only a day, but when more speakers were contacted, it had to be expanded to three days.

"They decided they needed more time and money, and they suggested AECL and Ontario Hydro pay for some of the conference," Cridland said. "When they couldn't, we provided a small amount more."

He said the original grant made by the commission was \$2,700, but this was increased by a further \$2,000 when the conference was lengthened.

Environment Canada also helped to fund the conference, to the amount of \$2,000, as well as one or two private groups.

Cridland said that when the grant was made, it was presented to Graves, who was representing himself "as far as we knew." He said it was assumed that a balanced talk would be presented on the subject of nuclear waste.

"It turned out to be the balance AECL and Ontario Hydro expected it would be," Cridland said.

He said he doubted the grant would have been made if CANWIN was the recipient.

"It gives us a little extra experience," Cridland said. "This is the first incident we've had of this kind. Under these circumstances, the results from the conference we get from him will be viewed in a different light than they would have been."

"ANTI-NUKE"

He said the conference was an "anti-nuclear movement" in the area.

Joan Wright, a spokesman for AECL, said the conference was turned down by his organization due to the lack of time that was offered to both AECL and Ontario Hydro.

"They offered us about two hours in a three-day conference," Wright said.

He said the conference organizers had more than the 48 hours notice AECL wouldn't attend that was claimed.

"They sent us a telegram that said 'in order for AECL to take part in the conference,' which means they were aware we weren't planning on attending," Wright said.

He said AECL had requested some changes in the program of the conference, but no reply was received until AECL said they would pay for a return telegram.

Wright also said that the short amount of time which had been offered to AECL and Ontario Hydro was not disclosed until AECL received a brochure on the conference from a group near Ottawa. He said the conference organizers had not sent them the schedule themselves.

He said AECL had never said they would attend.

He also disagreed with the contention that AECL and Ontario Hydro refuse to be involved in a debate with anti-nuclear groups, saying that one took place in Sioux Lookout last year, but none others have come through.

He said any proposals for such a meeting "usually turns out to be an anti-nuclear rally or an AECL presentation."

Wright also denied that AECL had ever planned on going into Kirkland Lake for drilling or testing.

AECL, Ontario Hydro Not Shoddily Treated?

NEW LISKEARD (Staff) — Ambrose Raftis, speaking on behalf of the Northern Ontario Coalition for Nuclear Responsibility, said Wednesday that up until 48 hours before the Canada Conference on Nuclear Waste held in Kirkland Lake last week, AECL had been giving the impression they would attend.

Raftis said neither AECL nor Ontario Hydro gave reasons for their not attending.

"We gave them every opportunity to make the conference as equitable as we thought it could be," he said.

He said charges that AECL and Ontario Hydro had been treated "shoddily" were not true, and that the organizers of the conference had been honest and "up-front" with both in their approaches to attend the conference.

He said AECL and Ontario Hydro had originally been offered 30 per cent each of the conference time, but had asked to contribute some of the funding.

"Because they are government-funded, they should pay their way," Raftis said. "They thought that if they didn't pay anything, there wouldn't have been a conference."

He said the Royal Commission for the Northern Environment, which funded most of the conference, had fallen prey to the arguments of AECL, saying there were two sides to the argument, "us and AECL."

"We have a problem here," Raftis said. "It's not just Ontario Hydro, or AECL's problem, but it's our problem. We're the ones who are going to have to pay for it."

He said AECL has no right to disregard the wishes of the community, as the community will be the ones to suffer from any effects of the dumping of nuclear waste.

Hydro won't attend

(continued from page 1a)

Mr. Graves applied for funding on his own behalf and not on the behalf of a citizens' group, Mr. Cridland said. The funding program is designed to help people gather facts that will aid in the commission's deliberations, he said. The commission wants to be objective. It is now, however, questioning the objectivity of CANWIN and the ability of the conference to be an unbiased one.

"I think the thing has simply snowballed," he said.

Those currently active in CANWIN hope it will become an umbrella organization for environmental groups across Canada. But currently, the only group that is an actual member of CANWIN, is the Temiskaming Environmental Action Committee (TEAC), of which Mr. Graves is a member. TEAC has been funded by the commission to conduct research on spraying programs in Northern Ontario.

According to Marc Couse, manager of the commission's public funding program, Mr. Graves said last week he and CANWIN are one and the

same thing. But the commission does not have a contract with CANWIN nor is it sure who CANWIN's members are. Whatever the case, TEAC's funding will not be hurt as a result of Mr. Graves' actions. The commission cannot hold TEAC responsible for what is happening to the conference, Mr. Couse said.

Also irritating the commission is a recent CANWIN press release which proved to be inaccurate. The press release incorrectly stated that John Fraser, Environment Minister, was going to attend the conference.

Mr. Graves said the error occurred primarily because of a clerical problem. The press release was being mailed to Toronto. A note asking that it be held until further notice was "inadvertently" not placed in the package, Mr. Graves said. The strike by operators of Bell Canada prevented him from contacting Toronto.

The commission is also displeased, Mr. Cridland said, because AECL and Ontario Hydro have indicated their participation in the con-

ference was subject to conditions. Ironically, last week, it appeared AECL was placing conditions on CANWIN by saying it would attend the conference if certain changes in the timetable were made.

In a Tuesday telephone interview from Pinawa, Manitoba, AECL

spokesperson Egon Frech accused CANWIN of being irresponsible in trying to stop research activities in the north. CANWIN members are arguing there is no safe way to dispose of the waste, yet they are trying to prevent the nuclear industry from finding a safe way, he said.

Mr. Frech emphasized the waste management program is currently at a research state and no sites for disposal have yet been determined. He also read from an AECL statement that said completed research will be examined by regulatory agencies, environmental bodies and governments and will be discussed with the public before a final decision is made. Permanent waste disposal would not occur until the turn of the century.

The statement also says the conference was formed out of political motivation, which Mr. Graves denied. As a crown corporation, the statements say, AECL "cannot become involved in a partisan activity especially during an election."

Besides complaining about the selection of speakers at the conference, Ontario Hydro has argued its contributions to the conference would be limited. According to a spokesperson for Ontario Hydro in North Bay, Bill Caesar, a telegram sent to organizers of the conference states Ontario Hydro's activities are confined "to interim storage of spent fuel in Southern Ontario and its transportation to a site to be determined over the next few years."

While Mr. Graves expressed disappointment that AECL and Ontario Hydro had refused CANWIN's invitation, he said the conference was still be of great value for those interested.

Mr. Graves did not accept criticisms launched by the two agencies and said they have only supplied "petty" reasons for not attending the conference. He said CANWIN endeavored to make necessary changes to the program.

"I think we gave them more than they were looking for... I think we went to great lengths to give them the things they were demanding," he said.

MENT SEEKING A RESPONSIBLE RESEARCH PROGRAM AS OUTLINED BY THE GEOSCIENCE COUNCIL AMONG OTHERS.

I HAVE NO DELUSIONS ABOUT CLOSING DOWN THE NUCLEAR INDUSTRY AND THE WASTE CERTAINLY MUST BE DEALT WITH, HOWEVER TO CONTINUE A PROGRAM IN DIRECT OPPOSITION TO THE RECOMMENDATIONS OF SCIENTIFIC BODIES HIRED TO DO RESEARCH ON THE PROJECT IS IRRESPONSIBLE. I BELIEVE THE PUBLIC, AND PARTICULARLY THOSE CITIZENS LIVING IN CLOSE PROXIMITY TO A POTENTIAL NUCLEAR WASTE DISPOSAL SITE, HAVE THE RIGHT TO KNOW ALL OF THE IMPLICATIONS AND RISKS INVOLVED..

I ATTEMPTED TO DEVELOP A CONFERENCE WHICH WOULD PERMIT THE PUBLIC ACCESS TO MANY VIEWS FROM A VARIETY OF EXPERTS, THOSE FROM WITHIN THE INDUSTRY AND THOSE CRITICAL OF IT. I DO NOT BELIEVE THAT ANYONE GAINED FROM THE ABSENCE OF AECL AND ONTARIO HYDRO FROM THE CONFERENCE.

MR CRIDLAND IMPLIES THAT THE SPEAKERS WHO DID APPEAR ARE ALL ANTI-NUCLEAR. DR JOHN GALE WORKS UNDER CONTRACT TO AECL. HE IS CRITICAL OF THEIR HASTE IN DEVELOPING A TEST FACILITY. THAT DOES NOT MAKE HIM ANTI-NUCLEAR.

DR THOMAS WINTERS PRACTICES AND TEACHES MEDICINE. BECAUSE HE HAS STUDIED THE EFFECTS OF LOW-LEVEL RADIATION AND VOICES CONCERN HE IS NOT NECESSARILY ANTI-NUCLEAR.

COMMISSIONER EMILIO VARANINI HEADED AN EXHAUSTIVE STUDY ON NUCLEAR WASTE DISPOSAL. THIS DOES NOT PRECLUDE THAT HE IS ANTI-NUCLEAR.

AS MR RAFTIS SUGGESTS IN THE SAME EDITION OF THE NORTHERN DAILY NEWS, IT APPEARS MR CRIDLAND HAS FALLEN PREY TO THE ARGUMENTS OF AECL.

AECL distorted facts to discredit conference

"Whenever a citizen or a group of citizens become involved in a controversial issue, especially when they do so against the wishes of powerful government agencies, a certain amount of criticism is to be expected," says Terry Graves, a member of the Timiskaming Environmental Action Committee and the Northern Ontario Coalition for Nuclear Responsibility and, recently, the co-ordinator of the Canada Conference on Nuclear Waste.

In a press release, Graves comments on the Atomic Energy of Canada Limited's attempts to "discredit" the NOCNR.

He feels the AECL has intentionally distorted facts to "besmirch honest effort, merely for the purpose of saving face." This, he says, is not expected or warranted.

"On behalf of a number of citizens who put in long hours of hard work organizing the Canada Conference on Nuclear Waste," says Graves, "I must respond to Atomic Energy of Canada Limited's calculated and well-orchestrated attempts to discredit us."

He "sets the record straight" on the funding for the conference by saying that "there was never any intention to deceive" either the Royal Commission on the Northern Environment or Environment Canada.

"I applied for the funding in my own name and hope to establish CANWIN (Citizens Against Nuclear Waste in the North) in the course of the conference," he said. "I have apologized to the Commission for any embarrassment they suffered in explanations to

AECL and Ontario Hydro."

Graves goes on to say that it is his belief that AECL and Ontario Hydro "feels that public funds should be made available only to groups reflecting their point of view." No attempt was made to conceal the name of the group, he said.

According to Graves, Environment Canada had received 800 copies of the conference's promotional brochure a week prior to the approval of funds for the conference. He states that the agency was "impressed" with the conference. The name, he says was clearly "emblazoned on the brochure."

He claims that AECL's charges of being "treated shoddily and not given adequate time allotments in the conference program" is "pure fabrication."

TRIED TO ACCOMMODATE

Graves says "every conceivable effort was made to include both AECL and Ontario Hydro" in the conference. And, according to Graves, AECL officials "told Timiskaming MP, Arnold Peters, that they would indeed take part in the conference" and Peters passed this information on to the organizers.

"At one point," says Graves, "AECL asked me to book accommodations for them." The group, he says, complied to all of AECL's demands so that "they would have no excuse to back out."

He says that when AECL received this information, their response was that they would not attend the conference because "CANWIN was politically motivated."

Ontario Hydro, he says, had

two reasons for not attending. The first objection, he reveals, is that "their role in the waste management program is limited to interim storage and transportation of waste." He states that the select committee investigating Ontario Hydro affairs revealed that Ontario Hydro "in fact plays a much larger though not visibly apparent role in the waste management research program."

According to Graves, a member of the select committee, Elie Martel, likens Ontario Hydro's role to a group which has been "making snowballs but does not want to be seen as the one throwing them."

The other objection listed by Ontario Hydro was what they termed a "lack of balance" on the program.

"With no representation from AECL and Ontario Hydro the agenda did, over the course of several weeks of pursuing speakers," says Graves, "tend to become loaded with non-industry speakers. But these people were not radical anti-nuclear protesters but rather top experts on various aspects of the industry," explains Graves.

"LACKS GUTS"

"The conference was not designed to be, nor was it an anti-nuclear rally," stresses Graves. "It was designed to be a forum where all views could be aired. Unfortunately," he goes on, "when a federal agency shows a 'lack of guts and substance, the opportunity for an open forum is lost.'"

"I believe that it is unfortunate that a large federal agency such as AECL finds it necessary to make juvenile and unsupported accusations in the press in order to obscure the real issue, that of a research program which lacks the substance to stand up to informed criticism from the public and non-industry experts and a public relations department which attempts to support that program without bringing it forthrightly before the public," he said.

2267 Gladwin Crescent
Ottawa, Ontario
K1B 4K9
(613) 521-9652



66
Legislative Building
Queen's Park
Toronto, Ontario
(416) 965-5929

LEGISLATIVE ASSEMBLY
Office of the Opposition
Evelyn Gigantes, M.P.P.

February 29, 1980

Editor
Northern Daily News
Kirkland Lake, Ontario

Dear Sir or Madam:

A capsule account of your interview (February 7/80) with Mr. Peter Cridland of the Royal Commission for the Northern Environment appeared in Hydro's "Short Circuit" on February 15. The interview concerned the funding of the Can. Conf. on Nuclear Waste, and implied that it was questionable for government or its agencies to provide money for a conference of the kind which was held in Kirkland Lake.

As a member of the Select Committee of the Ontario Legislature on Ontario Hydro Affairs for over four years, I would like to express my view that it's high time government provided funding for such conferences. The resources of people and money which has for years been available to Ontario Hydro and AECL to present their programs to the public are uncounted. Both organizations have access to the most sophisticated tools of modern communication, and they use them to great effect.

I think it entirely appropriate that citizens who question the policies and programs of Hydro and AECL should have access to information and money to allow organized discussion of the proposals of these public corporations.

The Hearings of the Select Committee in the North West convinced me that, as in Eastern Ontario, it is the residents of small and often isolated communities who stand in most need of such funding if they are to have a chance to participate in the decisions of government agencies such as Hydro and AECL.

It's rather important to examine the notion of "balance" as it is presented by Hydro and AECL. Their record shows a definite tendency to view positions other than their own as "unbalanced".

There's an old saying that "Money talks". As we all know, it's a true saying, and I think it only fair that ordinary citizens get some of that talking money.

Yours,

cc: Terry Graves

Evelyn Gigantes, M.P.P.,
Carleton East.

CHRONOLOGY

THE FOLLOWING IS A CHRONOLOGY OF THE EVENTS REGARDING ATTEMPTS TO GAIN THE PARTICIPATION OF ATOMIC ENERGY OF CANADA LTD. AND ONTARIO HYDRO IN THE CANADA CONFERENCE ON NUCLEAR WASTE.

IN A NOVEMBER 29, 1979 TELEPHONE CONVERSATION WITH EGON FRECH DIRECTOR OF PUBLIC RELATIONS FOR AECL'S WASTE MANAGEMENT PROGRAM, I PROPOSED A COOPERATIVE ORGANIZING AND FINANCIAL EFFORT REGARDING THE CONFERENCE.

ON DECEMBER 11, 1979 I WROTE TO EGON FRECH(attachment #1) AGAIN STATING MY INTENTIONS AND AGAIN SUGGESTING AECL PARTICIPATE AND CONTRIBUTE \$2,500 TO HELP ALLAY EXPENSES.

ON DECEMBER 12, 1979 I TELEPHONED HUGH IRVINE OF ONTARIO HYDRO AND MADE AN IDENTICAL PROPOSAL TO THAT MADE TO MR. FRECH OF AECL.

ON DECEMBER 18, 1979 I SPOKE BY TELEPHONE TO JOHN WRIGHT OF AECL. MR. WRIGHT SUGGESTED THAT AECL WOULD NOT BE INTERESTED IN SHAR- COSTS IN THE CONFERENCE BUT WOULD CONSIDER PARTICIPATING.

ON DECEMBER 27, 1979 I RECEIVED A LETTER FROM MR. FRECH DECLIN- ING FINANCIAL COOPERATION AND REQUESTING ADDITIONAL INFORMATION REGARDING THE CONFERENCE (attachment #2).

ON DECEMBER 28, 1979 I AGAIN WROTE TO AECL INVITING THEIR PART- ICIPATION IN THE CONFERENCE(attachment #3).

ON JANUARY 9, 1980 A LETTER WAS SENT TO MR. R. B. TAYLOR OF ONTARIO HYDRO AGAIN INVITING THEIR PARTICIPATION IN THE CONFERENCE(attachment #4).

ALSO ON JANUARY 9, THE TOWN COUNCIL OF NEW LISKEARD WROTE TO BOTH AECL AND ONTARIO HYDRO REQUESTING THEIR PARTICIPATION IN THE CONFERENCE (attachment #5 and #6).

ON JANUARY 10, 1980 I REQUESTED OF ARNOLD PETERS, MEMBER OF PARLIAMENT FOR THIMISKAMING AT THE TIME, THAT HE CONTACT AECL REGARD- ING THEIR PARTICIPATION IN THE CONFERENCE. MR. PETERS WAS ASSURED BY AECL THAT THEY WOULD PARTICIPATE.

ON JANUARY 15, 1980 I RECEIVED A TELEPHONE CALL FROM MICHAEL MARTIN OF AECL REQUESTING MORE INFORMATION ON THE CONFERENCE. DURING THIS CONVERSATION I OUTLINED THE CONFERENCE AGENDA AS IT WAS SET AT THAT TIME.

ON JANUARY 17, 1980 AMBROSE RAFTIS TELEPHONED ONTARIO HYDRO RE- QUESTING A RESPONSE CONCERNING THEIR PARTICIPATION IN ORDER THAT A FINAL AGENDA COULD BE PREPARED. A TELEX(attachment #9) WAS ALSO SENT AT THIS TIME.

WITH TWO WEEKS REMAINING UNTIL THE CONFERENCE BOTH AECL AND ONT. HYDRO WERE UNCOMMITTED.

EARLIER ATTEMPTS TO GAIN THE PARTICIPATION OF THE ATOMIC ENERGY CONTROL BOARD AND ENVIRONMENT CANADA WERE UNFRUITFUL.(attachments # 10 and # 11)

ON JANUARY 22, 1980 I RECEIVED A LENGTHY TELEGRAM (in letter form, attachment # 12) OUTLINING SEVERAL CHANGES IN THE CONFERENCE FORMAT NECESSARY TO GAIN AECL'S INVOLVEMENT.

BECAUSE OF THE LATENESS OF THE DATE I RESPONDED BY TELEPHONE TO MR. EGON FRECH. MR. FRECH DEMANDED A RESPONSE IN WRITING. ON JANUARY 24, I SENT A TELEGRAM TO AECL COMPLYING WITH ESSENTIALLY ALL OF THEIR REQUEST- ED CHANGES.

ON JANUARY 25, HAVING RECEIVED NO RESPONSE FROM EITHER AECL OR ONTARIO HYDRO I TELEPHONED BOTH REQUESTING A DEFINITIVE ANSWER REGARDING THEIR PARTICIPATION BY 1:00 PM MONDAY, JANUARY 28.

ON MONDAY, JANUARY 28 I RECEIVED A TELEPHONE CALL FROM MR. O'CONNOR OF ONTARIO HYDRO. MR O'CONNOR REQUESTED A DELAY OF 24 HOURS BEFORE RESPONDING. I HEARD NOTHING FROM AECL.

ON TUESDAY, JANUARY 29 I AGAIN TELEPHONED AECL AND ONTARIO HYDRO REPRESENTATIVES REQUESTING A DEFINITIVE RESPONSE TO OUR INVITATIONS TO PARTICIPATE IN THE CONFERENCE. REPRESENTATIVES OF BOTH ORGANIZATIONS INFORMED ME I WOULD RECEIVE AN ANSWER WITHIN A FEW HOURS. SHORTLY THEREAFTER I WAS INFORMED BY A TV REPORTER THAT AECL WAS HOLDING A PRESS CONFERENCE IN KIRKLAND LAKE AT 2:00 PM THAT AFTERNOON. AN HOUR AFTER THE PRESS CONFERENCE I RECEIVED A BRIEF TELEGRAM FROM AECL STATING THEY WOULD NOT BE PARTICIPATING IN THE CONFERENCE(attachment #13).

I ALSO RECEIVED A TELEGRAM FROM ONTARIO HYDRO STATING THAT THEY WOULD BE UNABLE TO PARTICIPATE(attachment #15).

ON JANUARY 30, AT THE TEMISKAMING MUNICIPAL ASSOCIATION MEETING, TO WHICH BOTH AECL AND THE TEMISKAMING ENVIRONMENTAL ACTION COMMITTEE WERE INVITED FOR THE PURPOSE OF MAKING PRESENTATIONS ON NUCLEAR WASTE DISPOSAL, I MADE ONE LAST ATTEMPT TO GAIN AECL'S PARTICIPATION BY OFFERING TO ALLOW AECL TO TAKE OVER THE PROGRAM OF THE CONFERENCE ON FRIDAY, FEB 1, IN ADDITION TO THE SATURDAY MORNING PORTION OF THE PROGRAM THEY HAD ALL READY BEEN OFFERED. THEY DECLINED(attachment #17).

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Timiskaming Environmental Action Committee

1979 December 11

AECL
Whiteshell Nuclear
Research Establishment


Dear Mr. Frech:

I should begin by informing you of our intentions regarding a conference on nuclear waste management. Our original idea was to hold a one day seminar on January 31, 1980, utilizing the funding which we received from the Royal Commission on the Northern Environment to bring in a number of speakers/experts to inform the public of all of the implications of a waste facility being located in any community.

After some discussion it was decided that only by inviting AECL and Ontario Hydro to participate could this purpose, of giving the public the whole story, be best served. Because this participation by the industry would entail extending the length of the conference, which would of course entail additional costs in terms of facilities and accommodations, and because of our limited funding, we find it necessary to request the minimum amount required (\$2,500) from AECL .

We feel that it would be irresponsible to deprive the public of this opportunity for open and frank discussion of a matter which is so important. Only by permitting the public access to all information and expertise on nuclear waste and the nuclear industry can a rational decision be made on its desirability in a community.

Sincerely,


T. Graves
T.E.A.C.

Copies to: Northern Daily News
Timiskaming Speaker
North Bay Nugget
Timmins Daily Press



Atomic Energy
of Canada Limited

Whiteshell Nuclear
Research Establishment

L'Énergie Atomique
du Canada, Limitée

Établissement de Recherches
nucléaires de Whiteshell

76
Pinawa, Manitoba,
Canada, ROE 1LO
(204) 753-2311
Telex No. 07-57553

WMPAO-79-486

1979 December 24

Mr. T. Graves
Temiskaming Environmental
Action Committee
R.R. # 1, Charlton Stn.
Ontario
POJ 1VO

Dear Mr. Graves,

Thank you for your letter of 1979 December 11 in which you extended an invitation to AECL to participate in your conference on nuclear waste management if funding of \$2,500 was provided. While AECL normally covers all expenses, including travel and accommodation, incurred by its staff attending such conferences, AECL can not provide the additional funding you requested.

Should you wish to extend the invitation, some additional information regarding your proposed conference would be useful to enable AECL to assess the degree to which it could participate. In particular, the following would be of interest; the subject, purpose and format of the conference, the expected audience and your proposed program of speakers.

I should stress that, at this time, AECL's program on nuclear fuel waste management is one of research aimed at assessing the validity of the concept of deep underground disposal in hard rock formations. There is no intent to select any site for a disposal facility until such time as the validity of the concept has been established.

Sincerely,

E.R. Frech
Head
Waste Management
Public Affairs

/ap

December 28 1979

AECL
Whiteshell Nuclear
Research Establishment

Dear Mr. Frech:

As you know from our telephone conversations of the past several weeks I am assembling a conference on nuclear waste management and its implications on Northern Ontario.

The conference will feature a number of speakers from Canada and the U.S.A. I invite AECL to make a presentation to the public regarding your nuclear waste research proposals and to participate in the conference workshops.

The conference will be held on January 31, February 1 and 2, 1980 at Northern College in Kirkland Lake, Ontario. For further information please contact me at 705-544-7761.

Your immediate attention to this invitation will aid us in avoiding scheduling conflicts.

Yours Sincerely,

Terry Graves
Conference Co-ordinator

c.c. J.E.J. Fahlgren
Commissioner
Royal Commission of the
Northern Environment

#872

CANWIN,
Box 9,
CHARLTON, Ontario.
POJ 1B0.
January 9, 1980.

Mr. R.B. Taylor, Chairman,
Ontario Hydro,
700 University Avenue,
TORONTO, Ontario.
M5G 1X6.

Dear Mr. Taylor:

As you are aware AECL is presently proposing the re-processing and dumping of Ontario Hydro nuclear waste in several Northern Ontario locations.

The "Canada Conference on Nuclear Waste" has been organized by citizens of Northern Ontario with the intent of developing a scientifically informed understanding of the benefits and risks of nuclear waste disposal. Scientific experts in nuclear waste management from Canada and United States have agreed to attend.

We are formally inviting Ontario Hydro to send suitable representation, competent in explaining the proposed case in scientific detail.

We feel the present approach of press releases, public statements and travelling lectures serve only to support growing alienation toward large corporate interests whether private or public. Only through public involvement can the true interests and concerns of an increasingly aware public be understood.

Yours very truly,

AM/ad

Ambrose Raftis.

opeiu 343

January 9, 1980.

Mr. R.B. Taylor,
Chairman of Ontario Hydro,
700 University Avenue,
Toronto, Ontario. M5G 1X6

Dear Mr. Taylor:

At the last two meetings of our Council, we have seen the attendance of people representing Canwin, which is a group who are against nuclear waste being disposed of in the north. These people are expressing their fears for not only the safety of themselves and their children, but also of the environment.

They have been working quite diligently in arranging a conference to talk about this subject and, from the appearance of their program, they have gone to great lengths to acquire knowledgeable people to speak on this matter.

Our Council feel that members of Hydro should be at this conference if nothing else, to defend yourselves, but also to contribute to the success of the conference.

We would therefore respectfully ask that you, or one of your senior staff members, plan to attend at the Northern College of Applied Arts and Technology in Kirkland Lake on January 31, February 1st and 2nd, 1980.

Yours very truly, .

W.F. Chatwin

W.F. Chatwin,
Chief Administrator and Clerk.

WFC/mp

January 9, 1980.

Mr. T.K. Shoyama, Chairman,
Atomic Energy of Canada Limited,
275 Slatter Street,
Ottawa, Ontario. K1A 0S4

Dear Mr. Shoyama:

At the last two meetings of our Council, we have seen the attendance of people representing Canwin, which is a group who are against nuclear waste being disposed of in the north. These people are expressing their fears for not only the safety of themselves and their children but also of the environment.

They have been working quite diligently in arranging a conference to talk about this subject and, from the appearance of their program, they have gone to great lengths to acquire knowledgeable people to speak on this matter.

Our Council feel that members of Atomic Energy of Canada should be at this conference if nothing else but to defend yourselves, but also to contribute to the success of the conference.

We would therefore respectfully ask that you, or one of your senior staff members, plan to attend at the Northern College of Applied Arts and Technology in Kirkland Lake on January 31st, February 1st and 2nd, 1980.

Yours very truly,

W.F. Chatwin

W.F. Chatwin,
Chief Administrator and Clerk.

WFC/mp

75

CANWIN,
Box 9,
CHARLTON, Ontario,
POJ 1B0.
January 9, 1980.

Mr. John Fraser,
Environment Canada,
10th Floor,
Fountain Blvd.,
OTTAWA, Ontario.
K1A 0H3.

Dear Sirs:

Atomic Energy of Canada Limited is presently proposing the reprocessing and dumping of nuclear waste in several Northern Ontario locations.

The Canada Conference on Nuclear Waste has been organized by citizens of Northern Ontario with the intent of developing a "scientifically informed" understanding of nuclear waste. Scientific experts on nuclear waste and various associated fields will be present. AECL and Ontario Hydro have been invited and AECL has given tentative approval to attend.

The conference should prove both informative and productive and we hope you can send suitable representation.

Please find enclosed preliminary pamphlets with an outline of speakers and agenda. An updated agenda will be sent out as additional speakers are confirmed.

Yours very truly,

AF/ad
Encl.
opeiu 343

Ambrose Raftis.

As citizens of an area in which AECL wishes to do research leading to the development of nuclear waste disposal facility in which to dispose of Ontario Hydro and Hydro Quebec's nuclear waste, we at TEAC believe it essential that AECL and Ontario Hydro take an active part in the Canada Conference on Nuclear Waste at Northern College of Applied Arts and Technology in Kirkland Lake, January 31, February 1 & 2. This Conference affords these agencies the rare opportunity for discussion with non-industry experts and the public.

Tear here -----

ONTARIO HYDRO

As a government agency concerned with providing nuclear energy to the public it is up to you to ensure that the public is made fully aware of the dangers created by the nuclear industry. This cannot be done simply by issuing press releases or public statements but must be done by exposing your programs to the questioning of experts and non-experts alike.

Citizens Against Nuclear Waste in the North (CANWIN), is holding a conference of experts at Northern College of Applied Arts and Technology in Kirkland Lake on January 31, February 1 & 2, 1980.

AECL and Ontario Hydro owe it to the Canadian public to attend this conference and present their views and those of the nuclear industry for public criticism and debate.

NAME _____

ADDRESS _____

Tear here -----

ATOMIC ENERGY OF CANADA LTD. (AECL)

As a crown agency concerned with waste disposal it is up to you to ensure that the public is made fully aware of the dangers created by the nuclear industry. This cannot be done simply by issuing press releases or public statements but must be done by exposing your programs to the questioning of experts and non-experts alike.

Citizens Against Nuclear Waste in the North (CANWIN), is holding a conference of experts at Northern College of Applied Arts and Technology in Kirkland Lake on January 31, February 1 & 2, 1980.

AECL and Ontario Hydro owe it to the Canadian public to attend this conference and present their views and those of the nuclear industry for public criticism and debate.

NAME _____

ADDRESS _____

13
attachment

Q

WR1 26 ENGLEHART ONT JANUARY 17/80 1430

J R O'CONNOR
ONT HYDRO PUBLIC RELATIONS
700 UNIVERSITY AVE
TORONTO ONT

YOU ARE OFFICIALLY INVITED TO ATTEND THE CANADA CONFERENCE ON
NUCLEAR WASTE ON JANUARY THIRTY FIRST FEBRUARY FIRST AND
SECOND AT NORTHERN COLLEGE IN KIRKLAND LAKE

AMBROSE RAFTIS FOR CANWIN

CANWIN

*
TELEGRAPH TMS

0



Atomic Energy
Control Board

Commission de contrôle
de l'énergie atomique

Operations Directorate
Fuel Cycle Branch

Your file Votre référence

Our file Notre référence

37-0-0

January 21, 1980.

Mr. Ambrose Raftis,
CANWIN,
R.R. #1,
Charlton, Ontario.

Dear Mr. Raftis:

Thank you for your brochure on the "Canada Conference on Nuclear Waste" planned for Kirkland Lake, Ontario, January 31-Feb. 2, 1980. Thank you for inviting the AECB to participate in the program.

Our participation has been considered and the decision arrived at to decline your offer. From our point of view, any involvement on our part would be premature considering the status of the AECL program in your area. With regard to our current position on the regulatory approach to the disposal of radioactive wastes, a statement was made to the Ontario Select Committee on Hydro Affairs as recent as January 10, 1980.

Thank you again.

Sincerely,

L.C. Henry,
Manager,
Waste Management Division.

P.O. Box 1046
Ottawa, Canada
K1P 5S9

C.P. 1046
Ottawa, Canada
K1P 5S9



Office of the Minister
Environment Canada

Cabinet du Ministre
Environnement Canada

79

January 17, 1980

Mr. Ambrose Raftis
CANWIN
P.O. Box 9
Charlton, Ontario
POJ 1B0

Dear Mr. Raftis:

On behalf of the Honourable John Fraser, I wish to acknowledge receipt of your letter dated January 9 and thank you for enclosing preliminary pamphlets on the Canada Conference on Nuclear Waste to be held starting January 31.

Rest assured that your recommendation to send a representative to this conference will be drawn to the Minister's immediate attention for consideration.

Sincerely,

Danielle Wetherup
Departmental Assistant



Atomic Energy
of Canada Limited
Research Company

Whiteshell Nuclear
Research Establishment

L'Energie Atomique
du Canada, Limitée
Société de Recherche

Etablissement de Recherches
Nucléaires de Whiteshell

Pinawa
Manitoba
Canada
R0E 1L0
(204) 753-2311
Telex 07-57553

WMPAO-80-27

1980 January 21

Mr. T. Graves
Temiskaming Environmental
Action Committee
R.R. #1, Charlton Stn.
CHARLTON, Ontario
POJ 1V0

Dear Mr. Graves:

Although there has been no response to my letter to you of 24 December 1979, you made a verbal invitation to me on January 8, 1980 for AECL to attend the proposed nuclear waste management conference at Kirkland Lake, Ontario on January 31, February 1 and 2 of 1980.

AECL has reviewed the proposed conference agenda outlined by phone on Thursday January 15, 1980 to Mr. M. Martin of our Ottawa office.

We understand that your proposed agenda is:

Thursday, January 31, 1980

Registration: 11:00 AM until 1:00 PM

1:00 PM	Welcome & Opening Remarks
1:30 PM	Dr. Gordon Edwards, CCNR, on Mine Tailings.
3:00 PM	Dr. Marvin Resnikoff on Transportation of Wastes
4:00 PM	Meeting of 60 Invited Citizen Participants
4:00 PM	Meeting of Speakers
5:00 PM	Dinner
7:00 PM	Paul Mackay, Birchbark Alliance
8:00 PM	Neil Reimer, Oil, Chemical & Atomic Workers Union

Friday, February 1, 1980

9:00 AM	Three Workshops: Resnikoff & Aarons -undecided -undecided
10:30 AM	Ontario Hydro
11:15 AM	Norman Rubin - Pollution Probe
12:00	Lunch
1:30 PM	Dr. E. Varanini, California
2:30 PM	Dr. Thomas Winters
3:30 PM	Three Workshops: (Not Decided)
5:30 PM	Dinner
7:00 PM	Evelyn Gigantes - NDP Ontario Select Committee Dr. Frank Summers - U. of T. Faculty of Medicine

Saturday, February 2, 1980

9:00 AM AECL
 10:15 AM Dr. Gordon Edwards - CCNR
 -then a rebuttal period for both AECL and Edwards probably
 11:15 AM to Noon.
 12:00 Lunch
 1:00 PM Marc Cherniack - New England Appropriate Technology Group
 2:00 PM Larry Solomon - Energy Probe.
 3:00 PM Three Local Party Candidates in the Federal Election
 4:00 PM Plenary Session
 6:00 PM Dinner - Dance

The proposed agenda is in our view not balanced and we suggest the following revised format would provide a better opportunity for an open, frank and balanced public discussion:

The revised format is:

Thursday, January 31, 1980

AM:
 -Welcome & Opening remarks by the organization responsible
 for putting the conference together.
 -An opening statement dealing with Canadian Nuclear Waste
 Management Research Program by AECL.
 -An opening statement by a critic of the Canadian Program.

Thursday

PM
 1:30 Dr. Edwards on Mine Tailings
 2:15 Representative of the Uranium Mining Industry with Expertise
 in Mine Wastes
 3:00 Dr. Resnikoff on Transportation of Wastes
 3:30 Ontario Hydro on Transportation of Wastes
 4:00 Meeting of Citizen Group
 4:00 Meeting of Presenters/Speakers
 5:00 Dinner
 7:00 Paul Mackay
 8:00 Neil Reimer

Friday, February 1, 1980

AM:
 9:00 - Three Workshops: - Resnikoff & Aarons
 - AECL - Health & Environment
 - AECL - The Regulatory System
 10:30 Ontario Hydro - Nuclear Power Generating System
 11:15 Norman Rubin
 12:00 Lunch
 PM:
 1:30 Dr. E. Varanini
 2:30 Dr. Thomas Winters
 3:30 Three Workshops: - Public Information Programs by David Foster,
 Energy Pathways

Revised format (cont'd)

Friday, February 1, 1980

PM

3:30 Three Workshops: (cont'd)
- Alternative Energy Programs in Canada -
Federal Dept. EMR. NRC ?
- Radiation & Man

5:30 Dinner

7:00 Evelyn Gigantes
Dr. Frank Summers

Saturday, February 2, 1980

AM

9:00 Dr. G. Edwards & AECL Representative - The Nuclear Debate

12:00 Lunch

PM

1:00 Marc Cherniack

2:00 Larry Solomon

3:00 Three Local Candidates in the Federal Election

4:00 Plenary Session

6:00 Dinner - Dance

If this wider, and we believe more fully democratic format is accepted, AECL will agree to participate and will work actively with your organization to seek to persuade the other government departments and agencies at the Federal and Provincial level to join us in this conference.

We would need an affirmative response to this revised format by Thursday, January 24, 1980, so that we (AECL) can arrange for the appearance of those scientists who can discuss with knowledge the declared subject matter.

May I take the opportunity to ask a favor from you? Mr. Martin has tentatively asked you to hold 4 rooms at the Commodore Hotel on the basis we might attend the conference. I now understand that similar hotel arrangements had indeed been made by another AECL staff member and as a consequence we would ask you to cancel those reservations at the Commodore.

Yours sincerely,

Egon Frech

E. R. Frech, Head
Waste Management
Public Affairs

JAW/lis

- cc: Northern Daily News, 8 Duncan, Kirkland Lake, Ontario
Timiskaming Speaker, 18 Wellington St., New Liskeard, Ontario
North Bay Nugget, 259 Worthington St. W. North Bay, Ont. P1B 8J6
Timmins Daily Press, 125 Cedar St. S., Timmins, Ont. P4N 2G9

ON RAIL EHRT

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CRT TLX PINAWA MAN 29 1318

MR T GRAVES TEMISKAMING ENVIRONMENTAL ACTION COMMITTEE

R R NO. 1 CHARLTON STN CHARLTON ONTARIO POJ 1VO

BT

ATOMIC ENERGY OF CANADA LIMITED WILL NOT BE PARTICIPATING IN THE
"CANADIAN CONFERENCE ON NUCLEAR WASTE" ORGANIZED BY THE CITIZENS
AGAINST NUCLEAR WASTE IN THE NORTH.

EGON FRECH ATOMIC ENERGY OF CANADA LTD

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NUCLEAR WASTE

Urge Atomic Energy And Ontario Hydro To Attend Conference

NEW LISKEARD (Staff) — Council here passed a motion Monday to write Atomic Energy of Canada Ltd. and Ontario Hydro to persuade them to participate in a conference on nuclear waste to be held in Kirkland Lake on Jan. 31, Feb. 1 and 2.

Council's action came at the request of Henry Ingiversen of the Committee Against Nuclear Waste in the North, after he presented information on the conference to council.

Ingiversen noted the conference was designed to act as a three-day education session to introduce the citizens of Northern Ontario to the implications of the nuclear industry, and in particular in regard to proposed plans to establish a nuclear waste storage depot in the area.

He noted that Canwin had planned the conference to present both sides of the issue but, while several nuclear experts had been lined up as speakers by the organization, no confirmation had been received from Atomic Energy of Canada Ltd., or Ontario Hydro as to their participation.

"We don't feel this conference has any value unless they participate in it," Ingiversen stated.

He said that the environmental group has been in contact with both organizations but has yet to receive a confirmation from either.

About 6,000 pamphlets have been circulated throughout Northern Ontario and the rest of the country concerning the conference and the group is hoping the public will be able to hear both the pros and cons of the situation in order to make up their own minds on the subject.

"We are against nuclear waste being deposited in Northern Ontario, however, the purpose of the conference is to get all the experts together and to have both sides heard to the fullest extent," Ingiversen explained.

Coun. Jim Moore said he would want to be certain that a strong chairperson controlled the meeting to ensure that both sides had an equal opportunity to present their views and Ingiversen stated the en-

vironmental group was presently working on this and felt they had a chairperson who could be fair to all.

Coun. Moore said he felt both sides of the story should be closely looked at by the populace of the area and that he was in support of such a conference as long as both sides were presented.

After further discussions, council decided to write AECL and Ontario Hydro to request their participation in the conference.

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TERRY GRAVES TEMISKAMING ENVIRONMENTAL ACTION COMMITTEE
RR NO 1 CHARLTON ON POJ 1VO

BT

ONTARIO HYDRO IS NOT ABLE TO PARTICIPATE IN THE CANADA CONFERENCE
ON NUCLEAR WASTE, KIRKLAND LAKE, JAN. 31 - FEB 2 FOR THE FOLLOWING
REASONS:

1. THE ROLE OF ONTARIO HYDRO IN THE NUCLEAR WASTE MANAGEMENT PROGRAM
UNDER AGREEMENT WITH THE FEDERAL AND ONTARIO GOVERNMENT, IS LARGELY
CONFINED TO INTERIM STORAGE OF SPENT FUEL IN SOUTHERN ONTARIO AND ITS
TRANSPORTATION TO A SITE TO BE DETERMINED OVER THE NEXT FEW YEARS.
OUR CONTRIBUTION TO YOUR CONFERENCE, THEREFORE WOULD BE LIMITED TO
THOSE AREAS OF ACTIVITY.

2. ONTARIO HYDRO BELIEVES THAT ANY MEETING OF THIS NATURE SHOULD
ATTEMPT TO PROVIDE THE COMMUNITY WITH BALANCED ARGUMENTS SO THAT
RESIDENTS MAY EVALUATE A PROPOSAL WHEN A DECISION IS ULTIMATELY
REQUIRED. YOUR PROGRAM DOES NOT, IN OUR VIEW, MEET THAT OBJECTIVE IN
EITHER THE SELECTION OF SPEAKERS OR THE TIME ALLOTTED TO THE
PRESENTATIONS. IT ALSO APPEARS DOUBTFUL WHETHER SOME OF THE SPEAKERS
FROM THE USA ARE SUFFICIENTLY FAMILIAR WITH THE CANADIAN PROPOSAL TO
CONTRIBUTE TO THE COMMUNITY NEED FOR FACTUAL INFORMATION ON THE
SUBJECT OF THE CONFERENCE.

CC:

W F CHATWIN CHIEF ADMINISTRATOR AND CLERK
TOWN OF NEW LISKEARD BOX 730 NEW LISKEARD ONTARIO

P S CRIDLAND ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT
55 BLOOR STREET WEST ROOM 801 TORONTO ONTARIO

MIKE MARTIN AECL OTTAWA

EGON FRECH AECL
WHITESHELL

NORTHERN DAILY NEWS
KIRKLAND LAKE ONTARIO

TIMMINS DAILY PRESS
TIMMINS ONTARIO

TEMISKAMING SPEAKER ATTN MICHAEL PEARSON
PO BOX 600 NEW LISKEARD ONT PHONE 647-6791

NORTH BAY NUGGET ATTN GARY BALL
PO BOX 570 NORTH BAY ONT PHONE 472-3200

CKSO (TV AND RADIO)
SUDBURY

CFCL-TV
TIMMINS

CKGB-RADIO
TIMMINS

C.I.KI -RADIO

17 JAN 1985 16 85

Find Alternate Method Of Disposal If Deep Disposal Doesn't Work

EAFLTON (Staff) — If deep geological disposal of nuclear waste turns out to be a losing idea, Atomic Energy of Canada Limited will not have lost a major battle.

John Wright, of AECL, said after a meeting of the Timiskaming Municipal Association Wednesday night that if need be, the present method of storage for spent

nuclear rods could be expanded.

Wright said there is no technical stumbling block to it, but this method requires continuous surveillance and monitoring.

He also commented on the differences of opinion between AECL and the CANWIN conference to begin in Kirkland Lake today, saying

that it was going to be an "anti-nuclear rally," or a "witch hunt."

He said AECL turned down the proposal to attend the meeting because they were only offered two one-hour presentations in the conference, as well as a lack of "unbiased participants."

He said AECL suggested a debate format between Dr.

Gordon Edwards and a scientist from AECL, but this was turned down by the conference organizers.

During the meeting, Terry Graves, one of the organizers, asked Dr. T.E. Rummery if he would consent to take part in the conference, and offered all of Friday's sessions to AECL.

ON RAIL EHRT

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MR T GRAVES TEMISKAMING ENVIRONMENTAL ACTION COMMITTEE
R R NO 1, CHARLTON STN CHARLTON ONTARIO POJ 1VO

BT

DEAR MR GRAVES:

WE HAVE BEEN TRYING TO TELEPHONE YOUR ORGANIZATION FOR THE PAST TWO DAYS AND HAVE NOT BEEN ABLE TO CONTACT YOU. WE ARE SENDING THIS TELEGRAM TO INFORM YOU THAT WE CANNOT ACCEPT YOUR LAST MINUTE INVITATION EXTENDED LATE WEDNESDAY EVENING AT THE T.M.A. NONE OF THE BIASES OR PARTISAN POLITICAL ACTIVITIES OF THE CONFERENCE HAVE CHANGED AND THEREFORE NONE OF OUR REASONS FOR NOT ATTENDING HAVE ALTERED.

SINCERELY

J A WRIGHT COMMUNITY RELATIONS CO-ORDINATOR FOR NORTHERN ONTARIO
ATOMIC ENERGY OF CANADA LTD PINAWA & MANITOBA

T.M.A.
255PM
CLR

ON RAIL EHRT

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